The Interaction Between Nurses And Elderly Postoperative Patients Experiencing Acute Confusion

by

Judith W. Brown

A thesis submitted to the University of Manitoba in partial fulfillment of the Masters of Nursing Degree

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ABSTRACT

An estimated thirty to fifty percent of elderly medical-surgical patients develop functional confusion while hospitalized. The purpose of this exploratory study was to examine the perceptions and interactions of nurses caring for patients experiencing acute confusion and to develop a taxonomy for patient interaction. A unifying conceptual framework, Kasch's (1986) theory of nursing action: skills and competency in nurse-patient interaction, guided data collection and analysis. The setting was a 326-bed community acute care hospital. The sample was comprised of thirteen acutely confused, postoperative patients and the thirteen nurses caring for them. Two instruments measured the nurses' assessment of the patients' mental status. Data collection for the study involved: participant observation of the nurses' nonverbal behavior, audiotaping of nurse-patient interactions, and open-ended interviews with the participating nurses. Quantitative analysis of the nurses' interactions revealed that nurses: asked a disproportionate number of questions, initiated most interactions, and frequently changed the topic of conversation. These strategies and the use of position-centered speech to modify the patients' behavior indicated that nurses controlled the interactions. Nurses communicated comfort and caring nonverbally. A hierarchical coding system, which measured the nurses' position- or person-centered speech, revealed that the majority of the responses were in the category "implicit understanding". The nurses' perception of the patient was also one of implicit understanding. The factors which influenced the nurses' communication were: the degree and type of the patient's confusion and whether orientation would be successful, the influence of colleagues, the physical and mental demands of care, and the work load. The responses taxonomy revealed that acutely confused patients attempted to convey meaningful messages to nurses. These findings have important implications for practice.

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To my husband, Rick, and my children,

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Love beyond words.

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Chapter I

STATEMENT OF THE PROBLEM

Interpersonal communication is defined as, "a complex, intentional or unintentional process that includes a person formulating thoughts into stimuli, transmitting the stimuli, and a response to the stimuli" (Fritz, Russell, Wilcox, & Shirk, 1984, p. 33). It is a vital component of all nursing actions and the foundation of the nursing process. In the past few decades, many books and articles have appeared which stressed the importance of communication in the development of a therapeutic nurse-patient relationship. Yet, there had been little systematic research into the dynamics of communication in the nursing context. Only a few isolated studies of nurse-patient interactions, in a variety of setting, had been published.

Demographic trends have indicated a continued increase in the number of elderly individuals. By the year 2031 twenty percent of the Canadian population will be over sixty-five years of age (Lefebvre, Zsigmond, and Devereaux, 1979). The concomitant increase in hospitalization for elderly individuals had not resulted in a proliferation of nursing research studies which focused on the problems experienced by older patients in acute care settings (Bossenmaier, 1982; Wolanin, 1983). This was particularly

evident in the study of communication. A paucity of studies on provider-patient interactions involving elderly patients had been noted (Haug & Ory, 1986; Jones & vanAmelsvoort Jones, 1986).

Hospitalization for the older individual had been deleterious. Acute confusion was found to be a common event following hospitalization for individuals over seventy years of age (Gillick, Serrell & Gillick, 1982; Williams, Campbell, Raynor, Musholt, Mlynarczyk, & Crane, 1985a). While confused, patients were often unable to express concerns or needs because of slurred, rambling, or repetitive speech. In the clinical setting, the investigator had observed that nurses were often so busy with the physiological aspects of patient care that they did not have the time needed to investigate fully the meaning behind the inappropriate communication. Rather than relying on communication to adequately assess the individual's mental status and provide a positive intervention, nurses often resorted to physical and chemical restraints to control the behavior of the acutely confused patient. However, many of the researchers who had worked with the confused elderly have urged the implementation of effective communication strategies by the nurse to assess, ameliorate, and prevent further deterioration of mental status (Bartol, 1979; Bergman, 1986; Porter, Rasmussen, & Burnside, 1981; Trockman, 1979; and Wolanin & Phillips, 1981). Wolanin

(1977) has urged further study into "the relationship of communication to the behaviors noted in the confused patient" (p. 74). The communication between the nurse and the acutely confused elderly patient in the tertiary care setting had never been studied.

The data generated from interaction studies could have important implications for nursing education and practice (Clark, 1983; Mathews, 1962; Webster-Stratton, Glascock, & McCarthy, 1986). However, a more holistic approach to data collection and analysis than previously had been attempted, was necessary to increase understanding of the interaction process. A holistic approach was achieved by incorporating a conceptual framework to guide data collection and analysis. The nonverbal behaviors of the nurse should have been studied as well as the verbal. This was particularly important for a study involving elderly patients because these individuals often had sensory deficits. Qualitative methods of data analysis generated by a conceptual model produced more meaningful results.

An underlying conceptual framework which guided the data collection and analysis had been absent from all other published nursing interaction studies. Without a conceptual axis, interaction taxonomies were not as meaningful as they could have been and judgments about the quality of the interaction were difficult to make (Clark and Delia, 1979; Diers and Leonard, 1966). A recently formulated theory of

nursing action (Kasch, 1986) which provided a conceptual basis for the analysis of nurse-patient interactions had not been tested in practice. By structuring the research on the theory of nursing action, the researcher was able to collect and analyze data using qualitative approaches. Qualitative methods of data analysis based on constructivist theory had been developed by several researchers (Applegate & Delia, 1980; Clark & Delia, 1979; Kasch & Lisnek, 1984). How useful the components of the theory were in the analysis of data from nurse-patient interactions was unknown.

With the exceptions of the studies by Bartz (1986) and Clark (1983), investigators had used a quantitative method of data collection and analysis. Researchers used quantitative methods to report the frequency and type of statements in the interactions. These reports did not focus on the interaction process. In the clinical situation, it was often the content and the dynamics of the interaction that determined it's quality. Mathews (1962) stated that in order to establish a psychological relationship with patients, it was the quality of the time spent with the patient that was important, not the quantity.

Inui and Carter (1985) stated that analysis of communication should "characterize information exchange that occurs through several channels, not only linguistically, but also paralinguistically and kinesically" (p. 528). The

literature review indicated that few nurses had studied more than one mode of communication. This omission did not seem justified. Nurses often employed a variety of nonverbal strategies especially when interacting with patients who had difficulty communicating verbally. Researchers reported that they often failed to understand the meaning of a response when the nonverbal behavior was not recorded (Jones and vanAmelsvoort Jones, 1986; Webster-Stratton, Glascock, & McCarthy, 1986). Considering the patient sample in the present research, it was deemed necessary to study the whole context of the interaction.

Different perceptions, experiences, values, knowledge and attitudes are brought into each nurse-patient dyad by the participants (Kasch, 1986). Social action emerged because of the interpretation and meaning each participant gave to the situation. Many of the previous interaction studies had not explored the relationship between the nurses' perception of the situation and the interpersonal behavior demonstrated. Understanding the social reality wherein the research took place was essential if results and conclusions of the study were to have meaning (Greenwood, 1984). Very often the setting impacted on the interaction process (Bond, 1983; Hockey, 1976; Melia, 1982; Quint, 1965). Hospital policies, the physical and psychosocial demands of the clinical situation, and the influence of other caregivers altered interpersonal behavior. Failure to

examine the individual perspective and social realities of practice may have been one of the reasons many of the previous researchers concluded that nurses were poor communicators (Armstrong-Esther & Browne, 1986; Bond, 1983; Jones & vanAmelsvoort Jones, 1986 Clark, 1983). Clark (1983) suggested that future interaction studies explore the influence of factors such as nurses' attitudes, the degree of responsibility and autonomy possessed by nurses, and the nurses' motivation.

After reviewing the clinical geriatric nursing research, Wolanin (1983) concluded that there was still a need for more studies at the first two levels of research which were necessary to lay a solid foundation for experimental studies. This was especially appropriate for interaction studies where the research has not been systematically developed. Kasch (1986) stressed the need for more descriptive studies which focused on interaction. This was necessary to help identify the communication skills which, in future studies, may be linked to patient outcomes. Therefore, a comprehensive study of nurse-patient interaction in which the data collection and analysis were guided by the components of a conceptual framework was needed to expand our understanding of the interaction process in the clinical area.

Because their numbers were increasing and their communication needs were great, elderly patients experiencing acute confusion comprised the sample. There had been a paucity of research studies on the needs of these patients. Further study was also needed which examined the variables affecting effective nurse-patient interaction when patients experienced confusion. A study such as this would have practical significance to nursing care.

The questions which guided this exploratory study were:

What interpersonal strategies did nurses use when communicating with elderly postoperative patients who were experiencing acute confusion?

Were there meaningful messages transmitted by patients when they were acutely confused?

What were the nurses' perceptions of the patient who was experiencing acute confusion?

From the nurses' perspective, what factors influenced the care and communication received by patients who were acutely confused?

Was there any relationship between the nurses' interpersonal behavior and their perception of caring for and communicating with acutely confused patients?

Chapter II

LITERATURE REVIEW

2.1 INTRODUCTION

"Communication is the structure of significant signs and symbols that brings order and meaning to human interactions" (King, 1981, p. 62). Human interaction included both verbal and nonverbal behaviors. Verbal communication was the language of symbols. Culture, the condition of the sensory apparatus, and mental status influenced words spoken or heard. Through body movements and gestures, individuals communicated nonverbally. Quite often these were involuntary and may have conveyed more accurate information than verbal communication. Nonverbal communication had been known to be a dynamic and powerful behavior. Used effectively, nonverbal communication could have an important influence on the interaction process. Both verbal and nonverbal communication were used extensively by nurses to assess, provide information, establish relationships and comfort. Touching and talking were found to be the two main components of comforting (Morse, 1983).

The review of the literature consisted of the available published studies that focused only on the verbal or nonverbal communication between the nurse and patient in

natural or simulated situations. This included the nurse-patient interactions and studies which examined two communication modes. Few studies were found which examined the nurse's perception of nurse-patient communication. Therefore, the review consisted of any study which examined internal or external influences on nurse-patient communication. Because the elderly patient experiencing acute confusion was the patient population under scrutiny, the state of nursing research for this group was also reviewed.

2.2 NONVERBAL COMMUNICATION STUDIES

A number of researchers have examined the relationship between nonverbal communication strategies employed by the nurse and the behavior of patients in numerous settings. The effect of touch on patient behavior had been most frequently studied. One of the earliest studies on the effects of a nurse's touch was Aguilera's (1967). An increase in the verbal interaction, rapport, and approach behavior of patients on a psychiatric ward was reported by Aguilera when the nurses on the ward touched the patient during interactions. Likewise, McCorkle (1974) reported an increase in the verbal responses of seriously ill adults when touched by their intensive care nurses.

The aging population had been the focus of recent nursing research designed to improve the care of elderly patients. Several researchers were interested in the relationship between the addition of nonverbal communication modes by nurses and the verbal responses of older patients. Touch had been found to facilitate communication. Hollinger (1986) stated that because of other sensory losses the elderly person may, "rely upon the sense of touch to a greater extent in the processes of interaction" (p. 10). Touch, applied by Hollinger at various times during a fifteen minute interaction with elderly hospitalized patients, increased the frequency and duration of the verbal responses of the experimental group. Similar findings were achieved by Copstead (1980) for elderly nursing home patients. She reported a slightly increased duration of interaction by patients who were touched by the nurse than those patients who were not touched. Copstead, as McCorkle did before her, used a previously developed interaction analysis (Bales) to code the data. All investigators were interested only in quantitative measures to analyze verbal responses.

It was often difficult to isolate only one form of nonverbal behavior for study. Seldom could other forms of behavior be controlled. In a quasi-experimental study, Rosendahl and Ross (1982) reported an increased score on a mental status questionnaire by elderly chronic care patients

when the investigators used attending behaviors. These behaviors included: facing the person, using eye contact, maintaining a relaxed posture, and listening without interruption.

The limited research available indicated that nonverbal communication had proven to be an effective interaction strategy for increasing the verbal response of various patient populations.

2.3 COMMUNICATION WITH THE PATIENT EXPERIENCING CONFUSION

Wolanin and Phillips (1981) have written an excellent book entitled Confusion: Prevention and Care. Throughout the book, the authors stressed the importance of effective communication in the care of the elderly patient with acute or chronic confusion. Their observations were based on years of clinical experience working with confused patients and on their own research. They were not the first nor the only clinicians to recognize the value of interaction strategies. Porter, Rasmussen, and Burnside (1981) cited the importance of verbal and nonverbal communication in the development of a working relationship with the confused elderly patient. Bartol (1983) stated that, "A relationship based on open, honest communication is a powerful nursing tool in working with all confused individuals" (p. 235). She noted that open communication gave the patient a sense of control over the situation. According to Bergman (1986),

humane concern for the confused patient was expressed through the nurse's ability to communicate "respect and love". She believed that valuing people should permeate all care. A comprehensive list of communication interventions, based on extensive clinical experience in acute care settings, had been complied by Trockman (1979).

A number of verbal and nonverbal strategies had been investigated for their effectiveness on the behaviors of patients experiencing acute and chronic confusion. An improvement in the patients' verbal communication and in their ability to maintain eye contact was noted by Burnside (1973). She used various touching behaviors on six patients with chronic brain syndrome. The reported improvements in these behaviors were based on the Burnside's subjective evaluation. Using a more rigorous methodology, Langland and Panicucci (1982) did not have similar success using touch on 32 elderly chronically confused female nursing home patients. They had hypothesized that there would be an increase in attention, verbal response, and appropriate action when touch was combined with a verbal request. An increase in the patients' attention, which was assessed by their nonverbal behavior, was reported. Thus, the researchers concluded that the relationship between the participants was improved.

The problem of acute confusion in the acute care setting had been examined sporadically in the last two decades. Two studies, set in intensive care units, tested the effects of communication strategies on the course of postoperative confusion. Budd and Brown (1974) reported a significantly lower incidence of the behavioral manifestations of confusion in postcardiotomy patients when the nurses employed a reorientation technique. Using a postoperative patient questionnaire, the researchers were able to establish which nursing actions were the most helpful. These were: constant orientation to place and person; reference to family members and family events; and repeated information about the patient's physical progress.

Significant results were also reported by Chatham (1978) in several of the manifestations of postcardiotomy psychosis. A family member was taught to consistently use; eye contact, frequent touch, and verbal orientation to time, person, and place while visiting the patient in an intensive care unit. The researcher reported that the experimental group experienced more appropriate behavior, better orientation to time, person, and place, less confusion, fewer delusions, and longer periods of sleep. Although the measurements in this experimental design were not well controlled, the results did reiterate the importance of both verbal and nonverbal communication when intervening in confused behavior.

The problem of acute confusion in elderly medical-surgical patients had recently come to the attention of nurse researchers. Communication strategies had been employed by the researchers but the effectiveness of these as interventions in acute confusion had not been isolated. Nagley (1986) included a ten minute nurse-patient interaction as one of many nursing interventions designed to reduce acute confusion in elderly patients on a medical unit. Nagley did not comment on how effective this strategy was. Likewise, communication was an important intervention employed by Williams and her colleagues in the two studies conducted in 1979 and 1985. These researchers tested the effectiveness of communication strategies and environmental manipulations in reducing acute confusion experienced by elderly patients after surgery for a fractured hip. By having the nurses in the study check off the interventions they used most frequently, Williams et al. (1985b) were able to determine that nurses used orientation and clarification techniques most often. They stated that the activities most consistently employed by the nurses were: providing information, integrating orientation into the conversation; and giving rationale for treatments and procedures.

Variable results have been reported when communication strategies were tested on patients experiencing both chronic and acute confusion. Because a valid and reliable instrument to measure changes in mental status had not been

developed (Williams, Ward, & Campbell, 1986), it was difficult to draw any definite conclusions from these studies. However, it appeared that nurse researchers were aware of the impact communication had on confusion.

2.4 DATA ANALYSIS

2.4.1 Established Interaction Models

The type of analysis employed in provider-patient interactions was a crucial factor if the results were to have meaning for practitioners. However, Inui and Clark (1985) in their review of the current research on provider-patient interaction reported that no detailed model for analysis existed. Several models were more frequently employed such as: Bales' Interaction Process Analysis, Roter's Modified Interaction Process Analysis, Stiles' Verbal Response Modes, and Katz's Resource Exchange Analysis. These models generally employed a process analysis in that units of speech were categorized and an inventory was taken on the number of statements within each category. Inui and Clark (1985) noted that these existing models did not capture the "psychometric properties" of communication. The holistic aspect of the interaction was lost. Whatever the analysis system employed, for naturally occurring data nurses have followed the standard methodology outlined by Inui and Carter (1985). The standard methodology was: an observation strategy; an emphasis on a

specific process or quality of particular interest; an exhaustive taxonomy for categorizing encounter events; and an operational approach to measuring these events.

In 1965, Conant applied the Bales' Interaction Process Analysis (IPA) to the tape-recorded interactions of 12 public health nurses. She was examining the role relationships between the nurses and 24 young pregnant women during two home visits. Conant reported that even though there was a wide variation of individual behavior, distinct patterns of role differentiation emerged. The role position of the nurse or patient determined who predominated in what interaction categories. The findings suggested that the nurse needed to give in the task and relationship areas if she was to form a positive relationship with the patient. Several limitations of the IPA were noted by Conant. These were: the exclusion of content, scoring difficulties, the inability to distinguish how one person responded to the behavior of another, and the lack of theoretical concepts.

Morgan and Barden (1985) also used the IPA to analyze nurse-patient interactions. Nurse observers rated the interaction between 11 public health nurses and 55 high risk perinatal women receiving their first home visit from the nurse. Interactions were classified according to Bales' twelve categories. Patient perceptions of the interviews were also elicited by means of a Likert scale questionnaire. Whereas only 7.9 nurse responses were rated as friendly

according to the Bales' classification, the majority of the patients perceived the nurses as friendly. Similarly, the patients did not perceive that the nurses asked too many questions; while 28.5% of the interaction fell into the question category. The investigators remarked that Bales' analysis measured the quantity but not the quality of the interaction.

Stile's Taxonomy of Verbal Response Modes was used by Beaton (1986) to analyze the interactions of 33 nurses caring for women in labor. Beaton reported that the women in labor communicated almost exclusively via the disclosure mode which indicated their concern for their own experience. Conversely, nurses communicated through the advisement, disclosure, or edification modes all of which indicated that the nurses were concerned with their own experience. Beaton concluded that nurses were not very patient-centered in their communication. The childbirth experience revolved around the nurses' definition of the situation.

2.4.2 Development of Interaction Models By Nurses

For over two decades, nurse researchers have attempted to develop and test interaction analysis systems. Beginning in the sixties, Mathews (1962) and Methven and Schlotfeldt (1962) developed scales to measure nurses responses to simulated patient situations. Later, other researchers developed quantitative coding frameworks from naturally

occurring nurse-patient interactions (Armstrong-Esther & Browne, 1986; Falkner, 1979; Jones and van Amelsvoort Jones, 1986; Hatton, 1977; Salyer & Stuart, 1985). Recently, two researchers have developed qualitative analysis frameworks (Bartz, 1986; Clark, 1983).

2.4.2.1 Model Development From Simulated Responses

Several nursing researchers attempted to develop scales or inventories to measure the quality of nursing responses. As early as 1962, Mathews developed a complex system of content analysis which she called The Response-to-Patient Inventory. This was a scale developed to measure the degree of the nurse's person-centered interaction behavior. The inventory was tested on the responses of 122 nurses to written vignettes of patient distress. Person-centered responses were those which elicited information from the patient and promoted self disclosure. Two-thirds of the respondents obtained scores in the non-person-centered category. The system had seldom been used in nursing, possibly for many of the reasons suggested by Kasch and Lisnek (1984) that it: lacked definitional specificity; was not tied to a specific nursing objective; and tended to confound disclosure, empathy, and information-giving.

Mathew's (1962) scale was used by Wallston, Cohen, Wallston, Smith, and DeVellis in 1978 to determine if there was an improvement in the degree of person-centeredness

after an intervention. The responses of two groups of nurses (n = 44) to disclosure statements of simulated patients were coded. The researchers reported that the average response fell between Mathew's categories "does not elicit information but gives information" and "elicits information but limits patient response". After an intervention which instructed the nurses on what constituted a helpful response, the researchers reported a significant increase in the person-centered scores of the experimental group.

Methven and Schlotfeldt (1962) developed The Social Interaction Inventory from the responses of 116 nursing students to descriptions of stressful hospital situations. The responses were delineated into five categories from most desirable to least desirable. In the most desirable category the nurse encouraged patient verbalization and stimulated the patient to use his own resources in problem-solving. The Social Interaction Inventory was tested in 1967 by Sethee who used public health nurses' responses to vignettes describing emotion-laden patient situations. She reported that the majority of nurses selected the least desirable and the middle responses. Respondents were also asked to identify the difficulties they encountered when interviewing. Feelings of inadequacy and a heavy case load were two of the difficulties reported.

Using Orlando's theory of nurse-patient interaction as her framework, Haggerty (1987) developed a system of eight response categories. These were: specific observations of behavior, general observations of behavior, tentative inference, declarative inference, objective information requests, action suggestions, advice, and ambiguous. These categories were used to code and compare the immediate responses of nursing students from associate degree and baccalaureate programs to vignettes of distressed patients. Haggerty reported no significant difference between the two groups. Both groups recorded a high proportion of responses in the first category, that is, specific observations of behavior.

2.4.2.2 Model Development From Naturally Occurring Data

Falkner (1979) focused her research on the verbal information student nurses gave to their patients. The researcher was interested in whether the 17 students who participated in the study gave information spontaneously or in answer to patients' questions. Her coding framework reflected the research question. Falkner concluded that nurses did not give information to patients and tended to control the interaction to such and extent that patients did not easily ask questions.

Several nurse researchers had employed a pre-coded analysis system (Hatton, 1977; Salyer & Stuart, 1985). Predetermined categories with checklists eliminated the rich qualitative aspects and the individual dynamics of the interaction (Clark, 1983). Salyer and Stuart (1985) recorded positive and negative actions and reactions on a pre-determined grid sheet. This was used to analyze the content of 20 interactions between intensive care nurses and intubated patients. They reported that positive nurse actions tended to yield positive patient reactions. Of particular interest, was the identification of silence during administration of patient care as the most commonly observed action-reaction phenomenon. The researchers did not attempt to explain this nor seek further clarification from the nurses. However, the primary use of silence may have had significant implications when patients had altered feedback patterns.

A dichotomous categorization was also developed by Hatton (1977) from a content analysis of her observations of the interactions between nurses and patients in a long-term care facility. She suggested that creating a positive-negative division for her analysis would increase the reliability. Because the investigation focused on the relationship between the nurse's attitude to the elderly and the responses she gave to elderly patients, only the nurses' interactions were recorded. Hatton did not attempt

a detailed discussion of the interaction data in her report and gave only a percentage of the positive or negative responses of the total interaction. There was no differentiation between technical and social interaction. Problems in collection and recording of data also prevented qualitative analysis.

Webster-Stratton developed an inventory which she called the Interpersonal Behavior Constructs (IBC). The inventory contained five main verbal dimensions for the analysis of nurse-patient interactions. These dimensions were: positive-negative affect statements, the process of eliciting information, and the process of giving and responding to information. The inventory was tested by Webster-Stratton, Glascock, and McCarthy (1986). Sixty audiotaped interviews between 35 pediatric nurse practitioners (PNP) and mothers during well-child visits were analyzed. Using the results of the IBC and a further analysis of the tone and style of communication used by the PNPs, the investigators reported social distancing and the assumption of the authoritarian role by many of the PNPs. From this analysis they were able to indicate specific areas for improvement in education. The research differed from most interaction studies in that it was conducted across a wide range of settings, which increased the external validity of the results.

Communication with elderly patients presented special challenges for the nurse because many older persons experience slower response times and sensory deficits. Surprisingly few researchers have conducted interaction studies between nurses and elderly patients. Apart from the Hatton (1977) study mentioned previously, only two other published studies could be located (Armstrong-Esther & Browne, 1986; and Jones & van Amelsvoort Jones 1986). Limited quantitative methods of analysis had been employed in these studies as well.

In a recent study, Jones and van Amelsvoort Jones (1986) recorded the two-way conversations between the residents of a Canadian long-term facility and the nursing staff. Only the analysis of the staff conversations to the residents was reported. Categories were divided into: words spoken, commands given, statements made and questions asked and answered. As such, these categories told little about the dynamics of the interaction and it's content. Nonverbal interaction was not assessed which also limited the scope of the study. The purpose of the research was to compare the communication patterns between staff and Canadian-born, and foreign-born residents. Only 850 words were spoken to the 36 residents in 72 hours of tape-recorded interactions which implied minimal verbal interaction with elderly

residents. Commands and task-oriented conversations were reported in greater frequency by the investigators. There was only one instance of social communication.

The results of a study conducted by Armstrong-Esther & Browne (1986) also demonstrated ineffective communication patterns on the part of the nurse. The interactions of the nursing staff working on a British geriatric ward and twenty-three elderly female patients who were lucid, slightly confused, and confused or demented were recorded. Postures and activities were examined as well but were not reported in this review. The analysis of the interactions was divided dichotomously into initiations by nurse and patient and responses by both nurse and patient. Non parametric measures were used for analysis. Staff initiated interaction more frequently to all groups and much more often to lucid patients. Statements and instructions were employed by staff more frequently than questions. The researchers studied the dynamics of the interaction only in terms of the frequency of initiation-response, not whether each was appropriate or encouraging.

2.4.2.3 Development Of Frameworks For Qualitative Analysis

A significant and extensive study of nurse-patient interaction was conducted by Clark (1983). Realizing that quantitative forms of interaction analysis had produced no further insights into the communication behaviors of nurses,

Clark developed a framework for an in-depth qualitative analysis of the content and dynamics of conversations. She also wanted to examine the verbal strategies employed by nurses. The conversations between trained and student nurses and postoperative patients were tape recorded. The settings were the surgical wards of three hospitals in the United Kingdom. These tape-recorded interactions were then subjected to both quantitative and qualitative analysis. Quantitative analysis revealed that nurse-patient conversations were: "short, infrequent, limited in content to nursing or treatment matters, and governed by the necessity of nursing contact" (p. 51). Qualitative analysis produced an interaction framework which included structure, attributes, behavior, and overall dimensions of the interaction. As was apparent in previous research, the quantity of nurse interaction was sorely lacking and Clark reported that the quality was in need of improvement as well. Her data highlighted some of the verbal strategies and tactics used by nurses to distance themselves from patients and to maintain conversation at a superficial level.

Qualitative analysis of six nurse-patient interactions during a critical illness event was executed by Bartz (1986). Tape-recorded interviews of nurse-patient interactions and observations by the investigator of paralanguage and nonverbal behavior comprised the data for

analysis. Analysis included; language, paralanguage, nonverbal behavior, content, processes, and product. Language was divided into biomedical-technical and casual. Nurses used primarily biomedical-technical language which helped them establish their role as teacher and expert. Patients used language to establish their credibility in the setting. The processes used by the nurses to control the interaction were: questioning, topic persistence, and self-monitoring. Patients used humor and narrative to control the interaction. However, patients' comments only changed the flow of the interaction, never the direction. Open-ended interview questions after recovery from the critical event were used by the investigator to examine the process and products of the interaction from the participants' perspective and these results will be discussed later in the review. Using qualitative analysis enabled Bartz to develop an extensive taxonomy for nurse-patient communication and provided directions for future research and education.

In summary, a review of the research conducted on nurses' responses in simulated and naturally occurring situations revealed that researchers preferred to develop their own interaction analysis systems. Coding systems based on responses to vignettes provided useful systems of analysis but had not generated many replication studies. A similar situation was apparent for systems developed from

naturally occurring data even though both quantitative and qualitative analysis systems had been reported. Quantitative analysis had been helpful in describing frequencies and the type of language or statements used. On the other hand, qualitative analysis provided a greater understanding of the processes involved in the interaction by establishing how language was used and how the interaction was controlled by the participants.

2.5 THE NURSE AS COMMUNICATOR

Nursing researchers who had conducted interaction studies readily concluded that nurses were ineffective communicators. Some of the investigators had reached this conclusion based only on assumptions or on the results of quantitative analysis. Others had attempted a more in-depth assessment of the causes of poor communication. It had been suggested that nurses communicate ineffectively because of: the role orientation of the nurse, the perceptions and attitudes of the nurses, and the factors inherent in the clinical setting.

2.5.1 Role Orientation Of The Nurse

The task orientation of the nurse was the conclusion drawn by Armstrong-Esther and Browne (1986) to account for the low levels of staff-patient interaction. By surveying 118 geriatric nurses, these researchers attempted to

investigate the attitudes and preconceptions nurses had when caring for elderly patients. Nurses were asked to choose from possible responses for three questions on a questionnaire. The results indicated that nurses considered performing physical activities for their patients more important and enjoyable than activities which kept the elderly socially and mentally active. No validity was reported by the researchers for the questions and it was questionable if the instrument used measured a complex concept such as attitude. The researchers did not state how they controlled for a multitude of variables, such as; education, experience, and setting which may have affected results. Jones and vanAmelsvoort Jones (1986) concluded from their results that the high percentage of questions asked by the nurses indicated task-oriented and routinized nursing interaction patterns.

The role orientation of nurses often blocked effective communication by nurses when interacting with confused elderly patients according to Nowakowski (1985). She noted that the traditional care-taking role of the nurse forced patients to relinquish their decision-making capabilities and caused patients to become passive and dependent. Thus, the nurse's communication focused on the negative aspects of the patient's disease and was often meaningless to the patient. Case studies were presented to illustrate her

point. In previous research with confused patients, Budd and Brown (1974) had stressed the importance of interaction which was meaningful to the patient.

2.5.2 Perceptions And Attitudes Of The Nurse

Open-ended interviews were used by Bartz (1986) to assess the meaning of a specific interaction between nurses and patients during a critical illness event. Bartz was interested in knowing what the 14 participants felt about the language, processes, and product of the nurse-patient interactions which she had tape recorded and analyzed. Nurse participants stressed the importance of communication and felt they adjusted their language according to patient characteristics and nonverbal behavior. This was not validated by the actual interaction. Bartz concluded that the lack of individualization by the nurses resulted in the patients not being able to recall any of their communications with the nurses. It was also noted by the investigator that the nurses believed that their communication reduced the anxiety of the patients, yet none of the patients in the actual interaction demonstrated or expressed anxiety. This lack of correlation between the interactions and the perceptions of the participants led Bartz to conclude that nurse-patient interaction was "dissonant and paradoxical" (p. 249).

Attitudes, developed over a lifetime, influenced what and how nurses communicated (Hein, 1980). Although this maxim had been repeated many times little research had been conducted on the effect of attitudes on nurse-patient interaction. Hatton (1977) attempted to determine if there was a relationship between the interaction of seven nurses in a nursing home and their attitude towards the elderly. She used Kogan's Old People Scale to measure attitudes. The findings showed a direct relationship between positive behavior by the nurse and the positive scores. The negative scale did not predict the level of negative behaviors.

The confused patient often evoked varying responses in nurses. Hatton (1977) observed that some of the long-term care nurses in her study avoided interacting with confused patients while others attempted to help and comfort the confused patient. Armstrong-Esther and Browne (1986) reported that the staff on a geriatric ward interacted more with lucid patients than with confused patients. In a study of interactions between care providers and residents in eight British purpose-built homes for old people, Lipman, Slater and Harris (1979) reported no difference in the quality of interactions of staff for confused or lucid patients. Quality was measured as either supportive and accepting or instrumental.

2.5.3 Factors Inherent In The Clinical Setting

Behavior must be studied in the natural setting to be understood. Chenitz and Swanson (1986) believed that the researcher must analyze "the setting, the implications of the setting and the larger social forces such as ideologies and events that affect behavior" (p. 6). The prevailing values and restrictions of the ward had an adverse impact upon nurse-patient communication. Quint's classic field study (1965) examined the controlling strategies used by nurses to block nurse-patient interaction with patients recovering from a mastectomy. Nurses were found to move rapidly and efficiently when caring for patients and to use strategies to avoid giving a direct answer such as topic changes, giving information, and abbreviating conversations. Quint discussed some of the cultural and subcultural origins of these behavior patterns. Organizational factors included: rotating assignments, team approaches, and presenting a busy life-saving atmosphere. Nurses supported the prevailing physician attitude which also blocked communication as much as possible. Quint cited the nurses extreme feelings of helplessness and need to protect themselves from strong feelings as reasons for this behavior. However, the researcher questioned such a use of power by the nurses over patients who were powerless.

Bond (1983) reported on a similar study which she conducted in 1972 which highlighted the task orientation of the nurse and the influence of other personnel in the clinical setting. Using the reports from the nurses about their conversations with patients on a cancer radiology unit, Bond concluded that nurses were concerned only with physical care. Nurses, like the physicians on the ward, employed avoidance tactics whenever possible. Bond stated "Nurses offered no conscious conceptualization or plan of what they hoped to achieve through communication apart from an earnest desire to cause the patient no distress" (p. 73).

A different perspective was provided by Melia (1982) researching in a comparable setting. Students working on a radiology ward in the British Isles were informally questioned by the investigator as to why they experienced difficulties communicating with patients diagnosed with cancer and what they did about it. The students identified tactics such as the deliberate withholding of information by the senior nurses as a major block to effective communication. To conceal their lack of information from the patients the students would use such strategies as pretending to be ignorant or being evasive when questioned by the patient. This study employed grounded theory techniques to explore the students' perception of nursing reality.

Hockey (1976) reported on the results on a questionnaire survey of 588 hospital and community nurses working in the British Isles. She reported that over 70 percent of the nurses working in general or geriatric wards felt that they required more time in order to give better patient care. Given more time, nurses would spend it communicating with patients. The nurses rated patient-centered care as the most important aspect of nursing. Patient-centered care involved; comfort, respect, communication, acceptance, understanding, and concern for the family unit. Hockey concluded that nurses were less interested in providing technical nursing and more interested in understanding and supporting the patients' psychological and social needs.

Numerous approaches were utilized to assess why nurses are unable to communicate effectively. Unfortunately, many of the methods used lacked validity and reliability which provided questionable results. Grounded theory offered the most promising methodology in that the results obtained were credible from the participants' perspective and were rooted in the social reality of the setting.

2.6 ACUTE CONFUSION IN HOSPITALIZED ELDERLY PATIENTS

Canada's population will continue to age. A Statistics Canada Study projected that one in every five Canadians will be over sixty-five by the year 2031. This projection

translated into a concomitant increase in hospital patient days for this group from 40% to 60% (Lefebvre, Zsigmond, & Devereaux, 1979). Older patients were noted to be particularly susceptible to acute confusion. Although this etiology was poorly understood, decreased cerebral reserves, the aging of the brain and special senses caused cognitive disorientation (Ahronheim, 1982; Lipowski, 1983). Physiological causes such as hypoxia, and metabolic disturbances; psychosocial stressors such as grief, and anxiety; and environmental factors such as relocation, and sensory overload or deprivation could precipitate an acute confusional state (Foreman, 1986; Wolanin & Phillips, 1981). Confused patients could not integrate incoming stimuli. Therefore, their environment became frightening and threatening (Trockman, 1979).

Health professionals who have studied the problem have estimated the percentage of elderly medical-surgical patients who become acutely confused to be as high as 30% to 50% (Foreman, 1986; Lipowski, 1983). Williams, Campbell, Raynor, Musholt, Mlynarczyk, and Crane (1985a) noted in their study of elderly patients with hip fractures that 51.5% experienced acute confusion postoperatively. A large prospective study conducted by Gillick, Sewell, and Gillick (1979) revealed that 29.5% of 502 hospitalized medical patients who were seventy years and over developed functional confusion unrelated to diagnosis. A study of the

daily prevalence rate of confusion in hospitalized patients over sixty years was conducted by Chishom, Deniston, Igrisan, and Barbus (1982). These investigators reported that 55 out of 99 patients over sixty years developed confusion, but this translated into a daily prevalence rate of only 5.5%. According to the investigators, their findings cannot be generalized because of the type of setting used for the study. Although the two instruments used to assess confusion had face validity, reliability was not stated.

Acute confusion was distressing for the individuals experiencing it and for their families. However, even more serious consequences had been reported. Lipowski (1983), in his review of the literature on delirium in the hospitalized elderly, noted several studies which reported that these patients experienced prolonged hospital stays and increased mortality rates.

Acute confusion in the elderly was not an isolated phenomenon. Nurse researchers had just begun to conduct more sophisticated studies on the problem in acute care settings. These have included prediction studies (Williams et al., 1985a) and intervention studies (Nagley, 1986; Williams et al., 1979; 1985b). Interaction research had not been attempted.

2.7 SUMMARY

Nurse-patient interaction had not commanded a great deal of research attention. Recently, there had been renewed interest in the verbal and nonverbal communication of nurses with elderly nursing home or extended care residents. Many of the interaction studies reviewed focused on a patient population which was able to interact appropriately. Only one study examined the interaction between nurses and patients who had altered message and feedback patterns (Salyer & Stuart, 1985). Patients such as these were extremely dependent on the caregivers' communication and understanding of the situation. Hospitalized elderly patients who were experiencing acute confusion also had altered communication patterns and were very dependent on effective nurse-patient interaction. Yet, as the literature indicated, this had not been studied. This fact was surprising when one considered the high incidence of functional confusion in hospitalized elderly (Gillick, Sewell, & Gillick, 1979; Williams et al, 1985a). Williams et al. (1979) noted this oversight. Demographic trends indicated that these numbers will continue to grow if current hospital practices persist.

Nurses made numerous attempts to develop interaction analysis models. Both simulated and naturally occurring data had been used for model development. Early attempts to develop models based on simulated data had been largely

abandoned. The emphasis on the quantitative analysis had failed to capture the rich qualitative aspects of the interaction. Recent studies using naturally occurring data collection had resulted in qualitative analysis systems which held more promise. Qualitative models provided direction for future research and educational strategies.

Results of research studies on nurse-patient interaction indicated, fairly conclusively, that nurses were ineffective communicators. It was found that nurses often employed communication strategies which impeded interaction with patients. These strategies were: overuse of commands and instructions (Armstrong-Esther & Browne, 1986; Jones & van Amelsvoort Jones, 1986); distancing (Clark, 1983; Webster-Stratton, Glascock, & McCarthy, 1986); and minimal interaction (Jones & van Amelsvoort Jones, 1986; Salyer & Stuart, 1985). In many of the studies, the conclusion that nurses were poor communicators was reached solely on the basis of quantitative data analysis (Jones & van Amelsvoort Jones, 1986; Salyer & Stuart, 1985). Other methodological flaws may have caused researchers to the same conclusion. The type of data collection influenced outcomes (Bond, 1983; Nowakowski, 1985), as did the sole focus on verbal interaction (Clark, 1983; Jones & van Amelsvoort Jones, 1986), or a data collection instrument which lacked reliability and validity (Armstrong-Esther & Browne, 1986). Only two researchers conducted in-depth grounded theory

studies to determine why nurses were ineffective communicators (Melia, 1982; Quint, 1965). Bartz (1986) used qualitative methods to collect information concerning the nurses' perceptions. The review of the literature indicated that future interaction research should examine the nurses' verbal and nonverbal communication. This research should also examine the factors which enhance or inhibit effective nurse-patient communication such as the role orientation of the nurse, the perceptions of the nurse, and factors inherent in the clinical setting.

Chapter III

CONCEPTUAL FRAMEWORK

3.1 INTRODUCTION

The conceptual framework which guided this research was a proposed theory of nursing action articulated by Kasch (1986). He called this theory, "A theory of nursing action: skills and competency in nurse-patient interaction" (p. 226). According to Kasch (1986), current nursing theories did not adequately conceptualize nursing action. Using a pragmatic approach, Kasch (1986) developed a theory which conceptualized nursing action as a process of social interaction. As yet, no theory was available which accounted for the nature and function of communication in the delivery of nursing care (Kasch, 1984). Theory, structured on the interactional approach, which adequately articulated the process of nursing action, should have guided research designed to improve practice (Greenwood, 1984; Kasch & Lisnek, 1984).

3.2 DEFINITION OF THE SITUATION

Many of the basic assumptions and concepts of symbolic interaction had been used by Kasch (1986) in the formulation of his theory. One of the basic premises of symbolic interaction was that human beings did not merely react to

stimuli but defined actions based on a subjective interpretation of the encounter (Blumer, 1962). Meaning was derived from social interaction and was created from experience. Interaction was mediated through symbols and by the meanings which individuals gave to objects. Human action was constructed by the individual within the social context and was not merely a release of energy (Blumer, 1962). That is, human behavior was guided by the individual's definition of the situation. Ball (1972) defined this concept as, "the sum of all recognized information from the point of view of the actor, which is relevant to his locating himself and others, so that he can engage in self-determined lines of action and interaction" (p. 63).

Grounded theorists had used this concept of the definition of the situation to guide theory development in nursing. Human behavior was studied in interaction within the social setting. Chenitz and Swanson (1986) stated, "The setting, the implications of the setting, and the larger social forces such as ideologies and events that affect behavior are analyzed" (p. 6). These researchers had urged the study of human behavior as it was understood by the participants.

It had been postulated by Kasch (1986) in his theory that nurses created their own subjective interpretation of situations and events which guided their behavior.

Embedded in the nurse's perception of the situation were, "beliefs about: self and other, the relationship that exists with the other, the focus or goals of the particular interaction, the type of clinical setting" (p. 227). Experience, knowledge, the rules and norms of the physical and social setting have impacted upon the nurse's definition of the situation (Kasch, 1986). There wasn't any right or wrong way to define the situation and it may "not coincide with objective reality". (Ball, 1972, p. 63).

Each individual's definition of the situation changed with every encounter. Most interactions usually proceeded smoothly because of shared norms governing conduct (Ball, 1972; Clark & Delia, 1979). Cultural norms shared through a common language have helped to bring stability and predictability to many encounters. Because each individual brought into every interaction an infinite number of interpretive schemes, constraints to communication arose. Nurses and patients may have had conflicting definitions of the situation. Kasch (1986) believed that these problematic nurse-patient encounters required skillful interaction by the nurse to negotiate consensus in the relationship. Kasch (1986) stated, "Every action and statement potentially makes an issue of what can be said or done in a relationship and establishes the rules that guide action within a particular relationship" (p. 227).

Consensus was necessary in order to achieve the mutual goals which were the responsibility of all nurses in any health care situation. While negotiating consensus, nurses and patients both worked to support the identity of the other. To do this and to negotiate mutual objectives, the nurse needed to employ a variety of communication skills and strategies (Kasch, 1986).

3.3 INTERPERSONAL SKILLS

Kasch (1986) had taken a functional perspective which meant that communication was viewed as a strategic mode of action and outcome. The focus of his theory was on the ability of the nurse to use strategic communication to control behavior in ways which facilitated accomplishment of nursing goals (Kasch & Lisnek, 1984). Interpersonal competence consisted of two functional components which were: social cognitive competence and strategic message competence (Kasch, 1984; 1986).

Social cognitive competence was defined as, "the way in which people acquire, organize, and give meaning to the information they use to formulate beliefs, goals, and plans that permit successful transactions with the environment and with others" (Kasch, 1984, p. 77). The way in which knowledge and experience were cognitively processed and organized was an important aspect of social cognition. A social cognitive skill was the ability to make inference

about another's: attributes, causes and motivations for behavior, emotional perspectives, and rights and obligations (Kasch, 1986). This was called perspective taking. In order to have communicated effectively, the competent nurse derived meaning from the patient's perspective and not from personal inference. Nurses who had high levels of social cognitive competence were able to comprehensively plan and execute strategic nursing action (Kasch, 1986).

To accomplish basic communication functions the nurse needed to be aware of and to have implemented a repertoire of interpersonal strategies. These communication functions were often the tacit goals which Kasch believed most patients had when entering a health care transaction and which most nurses would have developed for all patients. They have been outlined by Kasch in his theory (1984, 1986).

(1)Informational function: referred to the ideational content. An ability to elicit and provide information was implied. The nurse used strategies which promoted patient understanding, retention, and comprehension.

(2)Influence function: referred to how communication could modify patients attitudes, beliefs, or actions.

(3)Comforting function: referred to communication as a means of alleviating or moderating the patient's distressed emotional state through reassuring, comforting, and supporting.

(4)Relational function: referred to "strategic action that is used to define, control, and modify the relational contract existing between nurse and patient" (Kasch, 1986 p. 229). A functional relationship provided a resource for dealing with the psychosocial and emotional dimensions of illness, for securing cooperation and compliance, and for maximizing self-care (Kasch, 1984).

(5)Identity function: referred to the way in which communication was used in the presentation of self and in the control and management of identities in interaction. Supporting a patient's valid identity in the illness situation or providing positive beliefs about self were vital nursing functions.

3.4 CONSTRUCTIVIST ANALYSIS

Kasch integrated a constructivist approach to social perception into his theory and used many of it's precepts as the basis for analysis of communication. Constructivist theorists believed that "each person is seen to develop a system of cognitive structures (constructs) which channel behavior through providing implicit expectations and explicit beliefs concerning the objects and situations toward which behavior is directed" (Clark & Delia, 1979, p. 190). This theory combined cognitive development with interactional and cultural perspectives. Constructivists recognized individual differences in the adjustment and

manipulation of communication, in that, some people were more adept than others. Competence was gained through social experience.

3.4.1 Position-Centered and Person-Centered Speech

Several constructivist theorists have developed a system of analysis which incorporated Bernstein's sociolinguistic codes. The codes were a system of organizing the appropriate usage of language of a particular culture or social group. These codes fell into two categories; a restricted or position-centered code, and an elaborated or person-centered code (Applegate & Delia, 1980).

Closely shared identification characterized the communication in a restricted code. That is, persons communicating in a restricted code assumed they had knowledge of the other participant, based on the understanding of the other's assigned roles and within the particular context. Position-centered speech was shared by persons socialized within the same culture or social group (Kasch & Dine, 1988). Elaboration of the psychological characteristics of the other individual would not be undertaken. Feelings were elaborated through nonverbal channels rather than verbally (Applegate & Delia, 1980).

The primary goal of speech in the elaborated code was "the elaboration of unique qualities of individuals and contexts as the basis for the creation of social relationships" (Applegate & Delia, 1980, p. 253). When individuals did not share a common background, they had to construct and adapt communication so that messages were understood. The development of a more differentiated, abstract construct system allowed the individual to formulate more flexible, complex, and psychologically differentiated perceptions of others, and that this, in turn, should have led to the use of more person-centered communication (Applegate & Delia, 1980). Referencing the research on the communication of school teachers, Applegate and Delia (1980) had attempted to define the speech characteristics of person-centered individuals. Person-centered speech was noted in teachers who: provided reasons to their students for modifying behavior adapted to the feelings of those involved; did not enforce their own solutions to the situations; focused on the intentions of the behavior rather than the outcomes; were willing to engage in open-ended interactions; and encouraged verbal elaboration of feelings.

3.4.2 Hierarchical Coding System

Based on the concepts of restricted and elaborated speech, several constructivist theorists have suggested a conceptual ordering of communication strategies (Applegate & Delia, 1980; Clark & Delia, 1979). Once the communication objectives were identified, messages could be coded in terms of the underlying social cognitive processes of the participant (Kasch & Dine, 1988). Responses are ordered hierarchically along an axis from person-centered to position-centered behavior.

Kasch and Lisnek (1984) designed a coding system for the analysis of nurse-patient interactions which placed the nurses' responses on an axis from position-centered to person-centered behavior. The hierarchical coding system contained three major categories with three subcategories within each. In the first category, the nurse ignored the patient's perspective and relied solely on role power to modify behavior. An implicit understanding of the patient was displayed by the nurse in the second major category. Responses in the third category indicated that the nurse was able to focus on the unique individuality of the patient. Each of the subcategories displayed ascending levels of person-centeredness. A schematic representation of the coding scheme has been presented in Figure 3.1.

There were limitations in the hierarchical coding system noted by the constructivist theorists. Applegate and Delia (1980) suggested that performance levels decreased in the presence of emotional and physical fatigue, low levels of involvement in a particular situation, and high levels of anxiety. They also stressed the importance of understanding the social and institutional context. That is, the rules and implicit understandings which governed relationships within a particular institution. Clark and Delia (1979) warned researchers that a communicator might have a subtle reason for using a first strategy category in which case position-centered speech would have been observed. Therefore, it was necessary for the researcher to be aware of situations within the individuals and within the environment which could have changed the nature of the interaction.

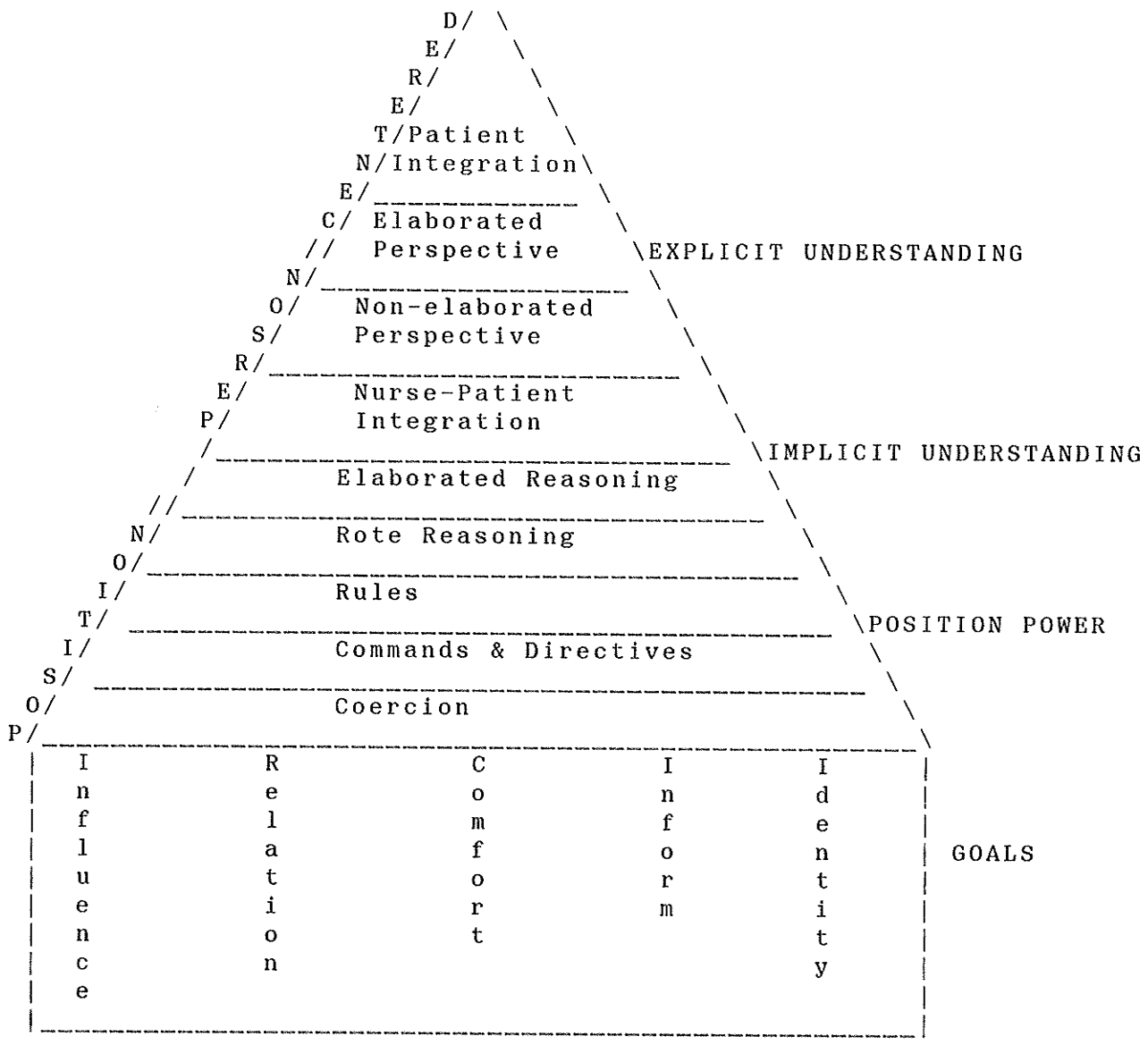
3.5 SUMMARY

Kasch's theory of nursing action as a process of social interaction provided the underlying conceptual framework which guided the data collection and analysis for this research. Human behavior was determined by each person's definition of the situation. Nurses and patients may have had conflicting definitions. Therefore, nurses required interpersonal competency to accomplish the tacit health care functions. Interpersonal competence consisted of two

functional components which were: social cognitive competence, and strategic message competence. Social cognitive competence was the ability of the nurse to understand the viewpoint of the patient and relate to him or her as a unique individual. The tacit health care goals of informing, influencing, relating, comforting, and identity maintenance could only be achieved when the nurse also possessed a repertoire of interpersonal skills. This was strategic message competence. Nurses who possessed both social cognitive competence and strategic message competence demonstrated person-centered speech. A method of measuring position-centered or person-centered speech was developed from constructivist theory. The hierarchical coding system was a conceptual ordering of communication strategies which Kasch and Lisnek (1984) adapted to analyze nurse-patient interactions.

Figure 3.1

Schematic Representation of the Constructivist Analysis



Chapter IV

METHODOLOGY

Data collection for the study involved participant observation, audiotaping of nurse-patient interactions, observations of the nurses' nonverbal behavior, and open-ended interviews between the participating nurses and the investigator. Two measurement instruments were used to ascertain the nurses' assessment of the patients' mental status. Raw data from the audiotapes of the interactions and the interviews were transcribed by the investigator which provided the data for analysis. Quantitative and qualitative methods for data analysis were used to interpret the data.

4.1 DESIGN

An exploratory design was used for this study. A conceptual framework of nursing action provided the basis for the analysis of nurses' interactions. The interaction of the patients' was described. Because little was known about the nurses' perception of communication in the clinical situation and care of the elderly confused patient, the investigator attempted to describe their perceptions.

A triangulated methodology for data collection was adopted. This required the use of two or more methods of data collection procedures within a single study (Duffy,

1987). The investigator examined the communication of the nurse using participant observation, an interview schedule, and qualitative analysis. Duffy (1987) noted that a between-method design, "permits one type of data to elaborate the findings of another by providing richness and detail" (p. 132).

4.2 DEFINITIONS

4.2.1 Theoretical Definitions

Acute confusion: Was "an organic brain syndrome characterized by transient, global cognitive impairment of abrupt onset and relatively brief duration, accompanied by diurnal fluctuation of simultaneous disturbances of the sleep-wake cycle, psychomotor behavior, attention, and affect" (Foreman, 1986 p. 34).

Interpersonal competence: Was the ability to use communication as a resource to accomplish health care goals (Kasch, 1986).

Elderly Patients: Individuals who were sixty-five years of age and over and were currently being treated as an in-patient in an acute care hospital.

Person-Centered Communication: The defining characteristic of this type of speech was that it "focuses direct and explicit attention on the needs, feelings, and psychological character of the patient" (Kasch & Knutson, 1985, p. 56).

Position-Centered Communication: Was speech that "discourages using language to elaborate the unique psychological features of individual perspectives and particular social settings" (Applegate & Delia, 1980, p. 252).

4.2.2 Operational Definitions

Acute confusional behaviors: Were behaviors characterized by: (a) verbal or nonverbal manifestations of disorientation to time, place, or person in the environment; (b) inappropriate or unusual communication such as non-sensical speech, calling out, yelling, and/or unusual silence; (c) inappropriate or unusual behavior such as attempting to get out of bed, pulling at tubes, dressings, and/or picking at bedclothes; and (d) illusions or hallucinations (Williams et al., 1985b).

Interpersonal competence: Was the global assessment of the ability of the nurse to demonstrate person-centered communication strategies based on the hierarchical coding system devised by Kasch and Lisnek (1984).

4.3 SETTING

A 326-bed community acute care hospital in the city of Winnipeg provided the setting for the study. Data collection took place on the two 40-bed surgical wards and a 12-bed Intensive Care Unit (ICU). There were primarily

general surgery patients on the one ward and a mix of orthopedic and general surgery patients on the other ward. The type of care delivery on both wards was called unit nursing. That is, a Registered Nurse (RN) was responsible for 10 patients on her self-contained unit. She was assisted in the care of the patients by either another RN or a Licensed Practical Nurse (LPN). These two worked as a team with neither having a definite patient assignment. Both medical and surgical patients were cared for in the ICU. The nurse in the ICU was assigned one or two patients for the entire twelve hour shift.

The administration of this particular hospital was extremely helpful in facilitating the passage of the research proposal through their review committee. Genuine interest in participating in the research process was also shown by the head nurses on the designated wards. The nurses on the wards were interested in the study, although hesitant to be involved.

4.4 SAMPLING PROCEDURES

4.4.1 Patient Sample

A convenience sample of thirteen patients was selected. Morse (1986) identified convenience samples as those individuals who were available and who wanted to participate in the study. In this study, patients were included only if

their family members agreed to allow them to participate. Postoperative patients who were experiencing acute confusion and met the following criteria were included:

Were 65 years of age or over.

Were in hospital as an in-patient.

Had a surgical operation within the last month.

Had been identified as being acutely confused by the nurse.

Had no evidence of confusion on admission according to family sources or the patient's chart.

Had no recent history of alcoholism.

Were able to speak and understand English.

Were able to hear with or without a hearing aid.

Had family members within the city.

Exhibited any one of the following behaviors:

(a) disorientation to time, place, or person

(b) inappropriate behavior such as picking, pulling, or climbing out of bed

(c) inappropriate communication for the patient or the situation

(d) illusions or hallucinations

4.4.2 Nurse Sample

The thirteen nurses selected for this study were those who were caring for an elderly confused patient whose relatives had given consent to participate. The nurse also agreed to participate.

Past interaction studies have not identified the importance of education in communication competency (Clark, 1983). However, only two educational categories of registered nurse, diploma and baccalaureate, were asked to participate. Haggerty (1987) reported that there was no difference in the responses of senior baccalaureate or diploma nurses to patients who were experiencing emotional or physical distress. Each participant in the study was responsible for some aspect in the care of the acutely confused elderly patient. In three instances, a student nurse was caring for the patient for a portion of the shift. However, the nurse involved in the study was responsible for and involved in the care, as well.

4.5 PROTECTION OF THE RIGHTS OF HUMAN SUBJECTS

The rights of the human subjects involved in this study were protected by various review boards and the provision of consents for all participants. Before the hospitals were approached, the research proposal was submitted to the Ethical Review Committee, School of Nursing, University of Manitoba. Approval from this committee has been included. (See Appendix A.)

Permission from the research review committee at the participating hospital was also sought before access to patients within the institution could proceed. (See Appendix B.)

Since the mental status of the patients in the sample was temporarily disturbed at the time of data collection, a close family member was asked to sign the consent. The study was explained to the family member who was assured that the patient's participation was entirely voluntary and refusal to participate would not affect the care received. The patient was identified by a code number known only to the investigator and would, therefore, remain anonymous. All information was kept strictly confidential. The tape recordings of the interaction were erased once the transcripts were made. Only members of the investigator's committee were allowed to see the transcripts. Copies of the results were available to the family if they desired them. Only one family requested a copy of the results. (See Appendix C.)

During the entire study only two people refused to give their consent. Both these individuals did not believe that the patient was displaying signs of acute confusion. The investigator did not argue the issue further. A son of one of the patients in the study was concerned that the investigator was going to ask his mother questions. This was clarified and he signed the consent without further concerns.

Generally, most of the family members contacted by the investigator were very willing to involve their relative in the study. The investigator had to answer many of the

family's questions related to: the causes of the confusion, how long it would last, and what they could do to help. Suggestions were received from the family about how they would prefer to have the patient cared for; their concerns about the restraints; and their wish that nurses would avoid the frequently heard terms of endearment, "sweetie" or "dear". One family was uncertain about how they should relate to their mother. They had seen one nurse support the woman's confusion and another nurse try to clarify the confused statements.

Many of the family members became very distressed at seeing a loved one in a confused state. Two daughters, when approached by the investigator for consent, broke down in tears. Another person had already begun to think about other living arrangements for the patient on discharge because she feared the confusion was permanent. Many family members just needed someone to talk to who appeared interested in the patient and the experiences of the family.

Once the patient's family member had given consent, the nurse caring for the patient was asked if she would consent to participate. Each nurse participant had the study explained to her and was given an opportunity to ask questions. She was assured that participation was voluntary and that she could withdraw at any time. Withdrawal would not adversely affect her employee status. The nurse would remain anonymous and was identified by a code number, known

only to the investigator. The employing institution was also not identified. All information was confidential. Tape recordings of the interaction and the interview were erased once transcripts had been typed. Data from the transcripts were available to the members of the investigator's committee. Written consent from each nurse was sought before proceeding. Copies of the results were available to the wards on request. (See Appendix D).

4.6 DATA COLLECTION PROCEDURES

Data collection for analysis took place at one community acute care facility in the city of Winnipeg. The period of collection of the raw data occurred over the four and one half months from January through May, 1988. Data was collected by: tape recording the interactions between the nurses and elderly patients experiencing acute confusion, observing the nonverbal behavior of the nurse, interviewing the participating nurse and recording the observations and impressions of the investigator in a journal. Data concerning the mental status of the patient was collected by means of two scales which assessed the patients' mental status and by examining the nurse's notes.

4.6.1 Gaining Access Into the Hospital

The original intention of the investigator was to conduct the data collection in five urban acute care institutions to increase the generalizability or external validity of the findings and to ensure subject availability. Access to subjects was gained in four facilities and details of the data collection process given to the surgical head nurses in these facilities. However, no matter how often the head nurses were contacted by the investigator, only one call was received from these nurses identifying available patients for the study. The patient recommended did not meet the study criteria. In the end, all of the subjects were recruited from one hospital. The investigator had worked in this hospital for many years and was known to both staff and administration.

Recruiting all subjects from one institution may have presented a threat to the external validity of the findings. However, Guba and Lincoln (1981) stated that it is difficult to make generalizations about human behavior because no behavior is context-free. They believed that the inquirer should be concerned with fittingness or the degree of fit between different contexts.

Access to patients and nurses in the one institution was initiated by means of a letter to the Assistant Executive Director, Nursing. The letter outlined the purpose of the study, involvement of patients and staff and

the facilities needed. (See Appendix E.) The research proposal and a form which requested review by the hospital review committee were also included. At this particular hospital, physicians participated on the review committee. Therefore, once the proposal was accepted by the committee it was not necessary to contact the individual physician of a study patient. Provisions for this individual contact had been negotiated with review committees in other facilities. The proposal was accepted by the review committee but data collection could not proceed until receipt of the letter from the Ethical Review Committee, School of Nursing, University of Manitoba stating that the proposal had been approved. The approval from the Ethical Review Committee was received on January 15, 1988 and data collection began the following week.

4.6.2 Introducing the Study

Because there were only three head nurses involved, each head nurse was contacted individually to seek permission to conduct the study on their respective wards. The study was explained to each head nurse. They were asked to read the Head Nurse Information Form which had been developed for this purpose. (See Appendix F.) The information sheet contained the patient and nurse criteria which had to be met for inclusion in the study. Also included on the information sheet was a list of behaviors

commonly exhibited by confused patients. As part of an extensive study on confusion, Williams et al. (1985b) had developed this list of behaviors to help nurses assess confused behavior. Permission had been received from Dr. Williams to use this list. Any questions or concerns which were expressed about the study by the head nurses were answered by the investigator. The major concern of one head nurse was the reactivity of the staff and how this might affect the results. It was decided that, in most cases, it would be more advantageous if the head nurses called the investigator when patients exhibited behaviors indicative of acute confusion rather than waiting for the investigator to call at an appointed time. Verbal permission was readily obtained from the three head nurses. On each of the units, the information form was posted in a convenient location so that all the staff could read it.

4.6.3 Recruiting Subjects

When the head nurse or staff nurse called to identify a patient who met the criteria for inclusion in the study, the investigator went immediately to the ward to check that all criteria for the patient had actually been met. If the relatives were not on the ward, the investigator called them at home to ask them for permission to include the patient in the study. A telephone protocol which outlined the basic purpose of the study and the involvement of the patient and

family member had been developed to achieve consistency in the request. If the relative was willing to sign the consent, this was achieved by the investigator meeting him or her at the hospital or by going to the relative's home. The convenience of the relative was considered at all times.

The major problem in the recruitment of subjects might have been the nurses' fear of being asked to participate in the study. Several times a week the investigator would personally check with the ward staff to see if subjects were available. On many occasions, there had been a subject but the nurse had not called. The staff could not offer any explanation for this. Another problem encountered, on occasion, was the inability of the staff to adequately assess the patient's mental status. In one instance, the sister of a patient told the investigator that her sister was confused but the staff had not recognized the fact. Another patient was confused but, according to the staff, wasn't confused enough to be in the study.

If possible, the nurse was telephoned at home before coming to the hospital to ask her if she would be a participant in the study. More often than not, however, the nurse was asked if she would consent to participate when she came to start her shift. Again, a protocol had been developed to achieve consistency. This included an explanation of the involvement and time required of the nurse. The nurse was allowed to express her concerns and ask

any questions before she signed the consent. Since the investigator was well known to the staff on the two wards, most of the nurses were very willing to participate, once approached, although they were nervous about doing so. The nurses in the Intensive Care Unit showed no hesitation about participating in the study.

4.6.4 Participant Observation

The investigator, dressed in a nursing uniform or in a lab coat, accompanied the participating nurse to the bedside of the acutely confused subject. While the investigator was with the nurse and the patient, the role of spectator observer was adopted. Although the investigator's primary purpose was to observe the nurse, any requests by the nurse for assistance with patient care were heeded. Researchers conducting interaction studies generally employed a form of participant observation especially when nonverbal behaviors were being assessed (Inui & Clark, 1985).

Jackson (1975) noted that when nurses were being observed they were often uncomfortable. Even though many of the nurse participants had previously worked at the bedside with the investigator, it was difficult to determine if behavioral distortions or reactivity by the nurses occurred. One nurse refused to have the investigator with her while talking to the patient. However, the data obtained from the interaction and the interview with this nurse were

included in the analysis. Another nurse found she was unable to talk to the patient while the investigator was present and consequently withdrew from the study. The data from the partial interaction of this nurse were not used for analysis. The investigator kept silent during the interaction unless addressed by the patient or nurse. On occasion, the investigator was asked by the nurse to assist in holding a patient on his or her side or in holding a limb for orthopedic procedures. This may have helped reduce the reactivity of the nurse to the investigator's presence. Several of the nurses remarked that, because they knew the investigator, they were not intimidated by her presence or by the tape recorder.

4.6.5 Nurse-Patient Interactions

Ten of the nurse-patient interactions took place in the patient's room usually while the patient was in bed. Patients were situated in either single, double, or four-bed rooms. Two interactions were recorded in the Intensive Care Unit.

Inui and Carter (1985) had suggested that videotapes were the preferred method of recording interactional data. However, the investigator did not consider this method appropriate for the study population. Videotaping may have caused greater confusion for the patient and would have been intrusive for the nurse. A small Panasonic tape

recorder, model no. RQ-342, which had a built in microphone, was used for all the nurse-patient interactions. Many of Bozett's (1980) suggestions for using a tape recorder in nursing research were adopted. A 60-minute tape wound past the clear end recorded the interaction. The recorder was either placed unobtrusively on the patient's pillow or placed in the investigator's lab coat pocket while she stood close to the patient. The number of interactions recorded was determined by the length and quality of the initial interaction. A five minute interaction was the minimum time set by the investigator. Interactions ranged from 6-30 minutes in length.

The investigator observed the nonverbal behavior of the nurse. A Nonverbal Behavior Checklist was developed by the investigator using guidelines suggested by Guba and Lincoln (1981). (See Appendix G). Contained on the list were the nonverbal behaviors that had been identified in the literature as useful nursing adjuncts in the care of confused patients. These behaviors were: facial expression, eye contact, body posture, expressive touch, interpersonal distance, and gestures. A wide right-hand margin had been left on the sheet to record notes or inconsistencies in the nurse's verbal and nonverbal behavior. Behaviors were recorded by the investigator immediately following the nurse-patient interaction. This was performed outside the room so that the nurse was not aware that these behaviors

were being observed. This procedure was also instituted so that the nurse was not distracted in her care of the patient. By waiting until after the interaction to record the behaviors, the validity of the observations may have been threatened because the investigator had to rely on memory.

The major problem researchers had when recording nonverbal behavior was the tendency to interpret the behavior (Guba & Lincoln, 1981). This was particularly problematic when recording a behavior such as touch in nursing. Often there was little difference between expressive and instrumental touch. Therefore, the investigator recorded only those behaviors where the nurse deliberately touched the patient expressively. Behaviors which were recorded as expressive touch were: holding the patient's hand; and stroking or patting a hand, arm, or head.

Immediately following the initial interaction, the nurse was asked to quickly assess the patient's mental status by marking an X on the Visual Analogue Scale of Confusion (VAS-C). (See Appendix H). The VAS-C, developed by Vermeersch (1986), allowed the nurse to make a global measure of confusion. It was important for this study to determine whether or not the nurse perceived the patient as confused since the nurse related to the patient on the basis of this perception (Foreman, 1987). The VAS-C was a ten

centimeter line anchored by no confusion at one end and severe confusion at the other. Degree of confusion was determined by measuring the distance of the respondent's mark from the "no confusion" end of the scale (Foremen, 1987).

In the interval between interactions or while waiting for the interview with the nurse, notes were made from the patient's chart. Demographic data were recorded such as: age, sex, sensory deficits, admission date, mental status on admission, date of surgery, surgery performed, and date of onset of confusion. The nurse's notes were scrutinized to record the nurses' descriptions of the patient's behavior and assessment of mental status while confused.

4.6.6 Nurse Interviews

Chenitz & Swanson (1986) advocated the combined use of participant observation and either formal or informal interviews which helped to validate what was observed. An interview schedule was developed by the investigator for use as a guideline for the nurse interviews. (See Appendix I). Interview schedules were best formulated from previously developed questions (Sudman and Bradburn, 1982). Such questions were unavailable for this research. Consequently, the investigator used some of the guidelines proposed by Sudman and Bradburn (1982) to design the interview schedule. The conceptual framework formed an

invaluable guide for the development of many questions. It was important to explore the social cognition of the nurses in terms of how they viewed the elderly confused patient. Kasch (1986) suggested consideration of features such as: attributes, emotional perspectives, and rights of the patient. The research question(s) were also reflected in the interview questions. Therefore, questions which sought the nurses' perceptions of factors which enhanced or hindered communication were incorporated.

Since the investigator wanted to explore deeply the nurse's thoughts about caring for and communicating with the confused patient, open-ended questions were used in the interview schedule. Sudman and Bradburn (1982) recommended open-ended questions because they allowed respondents as much nuance as they are capable of and they offered a rich data source.

The advice of Swanson-Kauffman (1986) was heeded by the investigator in order to achieve content validity in the interview schedule. She had suggested soliciting the comments of persons who had experience in the matter under study. Therefore, three experienced nurses from medicine, geriatrics, and mental health were asked to review the interview schedule and evaluate it's comprehensiveness. Their comments and suggestions were incorporated into the schedule. According to Guba and Lincoln (1981), the data

which evolved would have validity or credibility if other nurses who cared for elderly confused patients would be able to recognize their experience from the descriptions.

The validity of the interview schedule was also threatened by one of the four response errors outlined by Sudman and Bradburn (1982). Respondents could have been motivated to respond in a socially acceptable manner especially with the interviewer present. However, the investigator was an experienced interviewer both in her professional capacity and her experience as a research assistant. Experience, knowledge, and sensitivity were elements necessary to know when to probe for clarification or amplification (Chenitz & Swanson, 1986; Guba & Lincoln, 1981). Only one nurse said that she was very nervous during the interview. Otherwise, the nurses appeared fairly relaxed while the interview was in progress.

The interview with the nurse occurred at any time during the same shift and after the initial nurse-patient interaction. This was often during a coffee break or at the end of the shift. Patient care was not jeopardized. To avoid distractions, a quiet room was sought. This was usually the ward conference room or the nurses' lounge. Interviews with the ICU nurses took place at the foot of the patients' bed where the nurses could watch their patients. The interview was recorded on the same tape as the nurse-patient interaction. The average length of time needed

to conduct the interview was fifteen minutes. Some of the nurses were obviously tired when interviewed because it took place at the end of a shift or at a late hour.

Demographic information about the nurse and her nursing experience was gathered after the interview when a relationship was established and obtaining this information was less intrusive (Chenitz & Swanson, 1986). This information included: sex, age, nursing education, number of years nursing, number of years working with elderly patients, courses or workshops related to the care of the elderly attended, communication workshops attended, and the number of shifts she had been nursing the patient who was confused.

At the conclusion of the interview the nurse was asked to complete the Clinical Assessment of Confusion-II (CAC-II) developed by Vermeersch (1986). (See Appendix J). This was a checklist of twenty-five psychomotor behaviors associated with varying degrees of confusion. The nurse indicated her assessment of the level of confusion by marking the number of behaviors present. Vermeersch (1986) reported the interrater reliability of the CAC-II as $r = .88$. Sensitivity of the CAC-II was determined adequate with the correlation between the total weighted score and the level from the Visual Analogue Scale of Confusion (VAS-C) at $r = .81$ (Vermeersch, 1986). Foremen (1987) tested the CAC-II on hospitalized elderly and reported an internal consistency of

.80. Foreman (1987) reported that both the CAS-II and the VAS-C had convergent validity. Written permission to use the assessment instruments had been received from Dr. Vermeersch. (See Appendix K).

4.6.7 The Journal

A journal was kept by the investigator throughout the duration of the data collection. Entries were usually made following the visit to the hospital. Recorded data included: the difficulties gaining access to the various institutions; the results of the meetings with the head nurses; and the names and phone numbers of the various people who were contacted during the study. After each nurse-patient interaction and interview, the investigator recorded her interview with the family and how the family had reacted to the patient's confusion. Two family members had refused to participate in the study and their reasons for not doing so were noted to help the investigator when family members were approached. Reactions of the staff to the study were also recorded and the problems that were encountered gaining the staff's cooperation in informing the investigator when patients were available.

4.7 DATA ANALYSIS PROCEDURES

4.7.1 Transcribing

The raw data from the tape-recorded interactions and interviews were transcribed onto a computer disc using a Toshiba T3100/20 computer. Patients who are confused have a tendency to mumble or slur their speech so that often it was difficult to understand what was said. Whenever this problem occurred, the investigator used a series of question marks to indicate gaps in the interaction. In one of the interactions, it was almost impossible to hear the patient's conversation. In all thirteen interactions and interviews, the voice of the nurse was heard clearly on the tape. Names of doctors, the patient, family members, or other nurses were changed or abbreviated to ensure anonymity. Each transcript was numbered with the identical code number on the nurse and patient information forms and on the Nonverbal Behavior Checklist.

An attempt was made to transcribe the raw data immediately following each nurse-patient interaction and nurse interview. Chenitz & Swanson (1986) had recommended this because it allowed the investigator to modify or enlarge questions used for ensuing interviews. However, this was not always possible because of circumstances or investigator fatigue. It was noted on reviewing the first few nurse interview transcripts that the questions were generating the necessary information.

4.7.2 Nurse Interviews

Miles and Huberman (1984) suggested that prior to the fieldwork the researcher create a start list of codes which had a clear structure and rationale. This facilitated coding and prevented "retrospective hindsight" (p. 57). A simple two digit code was developed based on the interview questions, the conceptual framework, and the investigators experience working with patients who were acutely confused. A content analysis allowed the investigator to categorize the data into the general coding system. Krippendorff (1980) defined content analysis as, "a research technique for making replicable and valid inferences from the data to their context" (p. 21). Complete sentences or clauses which had contextual meaning were copied onto a computer disc which allowed the investigator to readily move the data into clusters and restructure categories as necessary. This method eliminated the use of index cards. A response taxonomy was developed. Thus, the communication of the findings was facilitated because group findings could be discussed rather than individual responses (Rasch, 1987).

4.7.3 Nurse-Patient Interactions

Transcripts of the nurse-patient interactions provided the data for qualitative and quantitative analysis. In order to derive meaningful analysis of the data, a content analysis of the transcripts was executed.

The primary unit for analysis was a sentence or clause that contained a subject and a predicate. When the investigator was examining the general characteristics of the interaction and coding many of the responses hierarchically, a larger unit of analysis was used which Clark (1983) has called a "turn". A "turn" was, "each time an individual speaks alone in an interaction" (p. 41). "Turns" were as short as a monosyllable or were several sentences in length. The primary concern was that the unit of analysis had meaning when removed from the general context of the interaction.

Quantitative analysis was achieved by recording all the nurse and patient "turns" for each interaction. The frequency of the closed and open-ended questions, questions which were related to the assessment of confusion, commands, and the changes in the flow of the conversation used by the nurse were recorded. These were tabulated and the frequencies indicated.

At the beginning of the study, the investigator had extracted from the literature communication strategies which had been tested or suggested by clinicians and researchers who had cared for patients experiencing acute or chronic confusion. These strategies were subdivided into verbal and nonverbal strategies. The nonverbal checklist and tapes provided the data for the nonverbal analysis, while the transcripts of the nurse-patient interactions provided the

data for the verbal analysis. Each strategy was given a number which was recorded on the transcript and checklist when it occurred. A frequency distribution of the strategies was tabulated. Individual interactions were examined to extrapolate the number and type of strategies used.

The investigator had chosen not to use a previously developed interaction analysis model because they did not attain a holistic level of analysis (Inui & Carter, 1985). Therefore, a model proposed by Kasch and Lisnek (1984) which followed Kasch's (1986) conceptual framework was tested. The content analysis of the nurse interactions was guided by the five behavioral functions for communication competency proposed by Kasch (1984, 1986). These were: influence, relational, comfort, information, and identity. Responses were placed in one of these five categories. The responses within the functions were then coded according to their level on the hierarchical coding system. Overall definitions for the categories had been developed by Kasch yet, further clarification and expansion of these definitions was necessary. (See Appendix L). The results were presented in a quantitative and qualitative framework. To facilitate interpretation and representation of the individual nurse's scores, a numerical scoring system was developed by the investigator. The numbers were assigned as such: 1A (-4), 1B (-3), 1C (-2), 2A (-1), 2B (+1), 2C (+2),

3A (+3), 3B (+4), 3C (+5). The results obtained from the coding scores were then divided by the length of the individual's interaction in minutes. By formulating a scoring system, the investigator was also able to conduct a statistical procedure to study the relationship between the hierarchical coding scores and the VAS-C scores.

Since the categories and subcategories in the hierarchical coding system did not have rigid definitions, a subjective interpretation was possible. In order to ascertain the reliability of the defining characteristics of the coding categories, an independent rater was asked to code a large sample of the nurses' responses. The rater was also asked to code the responses in the behavioral functions, as well. The initial coding of the hierarchical coding system produced a low interrater reliability score. As a result, the categories were redefined and the rater was asked to code another sample of the responses. A percentage-of-agreement interrater reliability of .78 was calculated. A percentage agreement was achieved by dividing the number of agreements by the total number of responses rated. Goodwin and Prescott (1981) indicated that this was usually the method of choice when the data were categorical.

An extensive search of the literature revealed that there had been no previous research on the communication of the confused patient. Therefore, previously developed taxonomies for this communication were not available.

Through content analysis, categories developed as they emerged from the data. A response taxonomy was developed. The categories were examined for homogeneity, inclusiveness, and clarity (Fox, 1984).

4.8 SUMMARY

A triangulated methodology was adopted for this exploratory study. A community based acute care hospital provided the setting for data collection. Thirteen elderly postoperative patients who were experiencing acute confusion and the nurses caring for them were the subject population.

Data for analysis was collected through participant observation, audiotaping nurse-patient interactions, and the audiotapes of nurse interviews. Measurement of the patients' behavior was achieved by two assessment instruments. Both quantitative and qualitative methods of data analysis were used. Analysis resulted in a response taxonomy for patient interaction and the interviewed nurses' responses. Nurses' interactions were subjected to content analysis, divided into the five behavioral functions, and then coded into the hierarchical coding system. The nurses' interactions were also analyzed to determine the frequency which they used the verbal and nonverbal strategies designed for patients experiencing confusion.

CHAPTER V

DATA ANALYSIS: NURSE INTERVIEWS

The results of the analysis of the nurse interviews are presented in this chapter. Descriptions of the nurses' thoughts and perceptions of the acutely confused patient and the care and communication involved have been structured into a response taxonomy. From this taxonomy, the factors which enhanced or inhibited communication between the nurse and the confused patient were delineated.

5.1 TAXONOMY OF NURSES' RESPONSES

Thirteen interviews between the nurse and the investigator were analyzed. A preliminary coding system had been designed before the analysis. The investigator's experience and elements of the conceptual framework provided the basis for formulation of the pre-coded system. Following a content analysis of the interviews, categories were developed which represented the perceptions of the nurse, her goals and interventions for the patient, and the factors which enhanced or inhibited effective communication with the confused patient. The taxonomy has been presented in Figure 5.1

Figure 5.1

Taxonomy of Nurses' Responses About the Communication with and the Care of the Confused Patient

1 Description of Confusion

- 1.1 Cognitive
  - 1.11 memory
  - 1.12 LOC
- 1.2 Interactive
- 1.3 General behavior
- 1.4 Motor activity
- 1.5 Psychotic behavior
  - 1.51 visual
  - 1.52 verbal
  - 1.53 tactile

2 Nurse Factors

- 2.1 Perception of the patient
  - 2.11 being there
  - 2.12 loss of control
  - 2.13 loss of self esteem
  - 2.14 embarrassment
  - 2.15 social isolation
- 2.2 Perception of the family
  - 2.21 distress
  - 2.22 controlling
- 2.3 Experience
  - 2.31 positive
  - 2.32 negative
- 2.4 Personal experience
- 2.5 Influence of peers
  - 2.51 how they influence
  - 2.52 those who follow own philosophy of care
  - 2.53 criticism of colleagues
- 2.6 Knowledge
- 2.7 Physical & mental demands of care

3 Goals

- 3.1 Interpersonal
  - 3.11 orintation
  - 3.12 increase understanding
  - 3.13 promote emotional comfort
  - 3.14 maintain self-worth
  - 3.15 assess extent of confusion
- 3.2 Physiological
  - 3.21 maintain physiological functions
  - 3.22 ensure safety

- 3.23 promote physical comfort
- 3.24 assess underlying causes
- 3.25 regain independence

4 Nursing Interventions

- 4.1 Interpersonal interventions
  - 4.11 the patient
    - 4.111 non verbal
    - 4.112 verbal
  - 4.12 the family
    - 4.121 enlisting
    - 4.122 informing
    - 4.123 support
  - 4.13 promote emotional comfort
  - 4.14 enhance self-image
- 4.2 Physiological interventions
  - 4.21 comfort measures
  - 4.22 prevent complications
  - 4.23 institute safety measures
  - 4.24 orientation strategies
- 4.3 Controlling measures
  - 4.31 restraints
  - 4.32 drugs
  - 4.33 notify doctor

5 Patient Factors

- 5.1 Characteristics of the confusion
  - 5.12 degree of confusion
  - 5.13 type of confusion
    - 5.131 combative/pleasantly
    - 5.132 acute/chronic
- 5.2 Characteristics of the patient
  - 5.21 behaviors
  - 5.22 physical aspects
  - 5.23 language
  - 5.24 acuity

6 Environmental Factors

- 6.1 Work load
- 6.2 Frequency of patients who are confused
- 6.3 Physical structure of the ward

5.2 DEFINING CONFUSION

To help the nurses relax, the investigator asked a very general question about confusion. Nurses were asked to indicate the behaviors which would suggest to them that the patient was confused. The responses given by the nurses were very similar to the categories developed by Vermeersch (1986) for the Clinical Assessment of Confusion-II checklist. The nurses' responses were easily placed into the five behavioral categories found on the checklist. These categories were: cognitive, interactive, general behavior, motor activity, and psychotic behavior. Psychotic behavior was further subdivided into visual, verbal, and tactile. The responses in each of the categories were evenly divided except for psychotic behaviors which were the least often described by the nurses in this study.

Written entries in the nurse's notes contained much the same information about the behaviors of the confused patient as the nurses had described. The patient's behavior was most often described as agitated or confused. The nurses described the patient's hallucinations, verbal behavior, and erratic motor activities in greater detail in the notes. It was noted that the nurses often charted that patients climbed over the bed rails and were found in the bathroom.

5.3 NURSE FACTORS

5.3.1 Perception of the Acutely Confused Patient

The investigator tried to elicit the nurses' perception of the confused patient with two questions. The first question asked was a more subtle way of trying to ascertain how person-centered the nurse was. When asked, "What comes to your mind when you hear in report that the patient you've been assigned to is described as confused?" all the nurses immediately considered the extra work involved. However, three of the nurses (23%) went on to say how distressing the confusion must be for the patient and the family.

The next question, "What do you think it's like to be old and suddenly confused?" focused the nurses' attention on the plight of the patient. They mentioned the loss of control, the loss of self-esteem, the embarrassment, and the social isolation. Seventy six percent of the nurses were concerned about the loss of control. They noted items such as: "tied to a bed", "unable to move", "strangers telling you what to do", and "independence is taken away". Five of the nurses (38%) felt that the patient was aware of the confusion and was bothered by it or tried to "cover up". Items such as, "They'll say I'm lonely" were placed in the socially isolated category. Several of the nurses or 46 percent tried to picture themselves as confused. One of them said, "I try to put myself in their place and realize how frightening the situation is". All of the nurses rated

the experience in very general terms as "very scary", "terrible", or "frightening". Two of the nurses (15%) said they didn't talk to their patients about the experience when the patient was lucid again for fear of upsetting the patient. This may have accounted for the generality of the descriptions.

5.3.2 Perceptions of the Family

Eight (62%) of the nurses also considered what it was like for the family. Seven (54%) mentioned how distressing it would be for the family to see the patient confused and not understand why it was happening. One nurse saw the family as very controlling, taking away the rights and responsibilities of the patient. It was again noted that the nurses described their perceptions of the family in general terms without specific reference to the family of the patient they had been caring for. Thus, no mention was made of how the family felt about restraining the patient or how they didn't like the terms "dear" or "sweetie" which nurses often use. Nurses were aware that family members often thought that the confusion would be permanent. This was, in fact, one of the major concerns of several family members who had spoken to the investigator.

5.3.3 Experience

The investigator was interested in knowing whether or not experience was a factor in how nurses' communicated with and cared for acutely confused patients. Six nurses (46%) said that their experience with patients who were confused had a positive impact on how they now relate to them. As a nurse said, "I'm a tad more patient with them then I used to be". Conversely, three of the those interviewed (23%) thought that experience had not helped them deal with these patients.

5.3.4 Personal Experience

Only one nurse mentioned that the personal experience with her confused grandmother had made her more empathic to other confused people.

5.3.5 Influence of Peers

Nurses on the wards of this particular hospital often worked in pairs. Therefore, it was necessary to determine what effect the attitudes and work habits of a partner had upon the care and communication given by the nurse respondent. Working with more experienced nurses had been a positive influence for the three (23%) of the less experienced nurses in the study. Four of the nurses (31%) said they followed the same type of care given by their partner, whether they agreed with their partner's practices

or not. However, two of the nurses felt guilty about following a partner's poor example, as was evident in the comment, "sometimes you could just kick yourself for doing something the way someone else has done". Three of the more experienced nurses (23%) said they were not influenced in any way by others but followed their own standards of care. They commented, "I treat everybody pretty well the same." or "I've learned that you have to approach each person individually". Whether they were influenced or not by the person they worked with, the nurses were very critical of the care they saw their colleagues giving. Fifty four percent made comments such as, "I don't like some of their approaches". Nurses complained that others were abrupt with the patient, didn't treat them with dignity, or were aggressive.

5.3.6 Knowledge

Only five of the nurses (38%) made any specific reference to their knowledge about how to communicate and care for the patient experiencing acute confusion. They had gained most of their information from their formal education. Most of that information was not specific to the care of the confused patient. That is, they had learned communication skills but not how to adapt them. Students were responsible to independently learn how to care for

confused patients. An experience at one of the long-term care facilities in the city during training had been positive for one of the nurses.

5.3.7 Physical and Mental Demands of Care

The majority of the nurses (85%) cited how physically and mentally demanding it was to care for patients experiencing acute confusion. They felt frustrated, exhausted, fed up, and tended to lose their patience when caring for confused patients as frequently as they did. Constantly repeating explanations and procedures, or never having the time to finish their work properly, caused many of the nurses to become frustrated. One nurse said, "you feel at the end of the day you've really not accomplished anything, so it goes against all what you've been taught". The quality of the communication often depended on how fatigued the nurse was. One of the nurses expressed her frustration about having to care for so many confused patients in the following manner:

> I think that working here full time has made me rather, um, I don't know, short tempered. But I'm not as patient because I'm here full time and I'm not going to get out late on every shift just because I'm doodling along talking to patients like I should instead of hustling through my work.

5.4 GOALS

The nurses were asked to state their goals for the acutely confused patient they were caring for on the day of the interview. Some of the nurses included assessment strategies along with goals, so assessment was coded under goals. Goals were divided into interpersonal and physiological categories.

5.4.1 Interpersonal Goals

The primary interpersonal goal for every nurse was to try to orientate the patient. That is, the nurse would attempt to clarify the patients' thoughts and perceptions of the environment by reminding the patients about the surgery, the hospital, the caregivers, and family members who had been to visit. Otherwise, interpersonal goals were seldom mentioned. One nurse would provide emotional comfort, "keep her from having that lonely feeling". This same nurse was the only one who wanted to maintain her patient's sense of self worth. Increasing patient understanding was a goal for four nurses (31%). This would be accomplished by explaining nursing procedures. Of the seven nurses (54%) who included assessment as a goal, two would assess the extent of the patient's confusion using interpersonal strategies.

5.4.2 Physiological Goals

Apart from orientation, physiological goals took precedence. Because all the patients in the study were in the immediate postoperative period, it was not surprising that the second most frequently mentioned goal for the majority of the nurses (77%) was to maintain physiological functioning and prevent complications. For many of the nurses (62%), ensuring the patient's safety was also very important. They noted how easy it was for the patient to sustain an injury while confused. Eight nurses (62%) wanted to promote physical comfort. Four of the respondents (30%) wanted the patients to regain their independence. These nurses did not elaborate on how they planned to increase independence. However, judging from other statements made by the nurses, it seemed that this meant activities such as walking independently. Five nurses (38%) would assess for underlying causes of the confusion.

5.5 NURSING INTERVENTIONS

Nurses were asked by the investigator what nursing actions they would take when their patient was acutely confused. Responses were coded under three main headings: interpersonal, physiological, and controlling. Since the focus of the study was communication, a separate question was asked about the communication strategies used by the

nurse when her patient was confused. The results of this latter question have been presented in the intervention category.

5.5.1 Interpersonal Interventions

5.5.1.1 The Patient

The responses to the question about communication were divided into verbal and nonverbal strategies. Seven nurses (54%) commented on the nonverbal strategies of: eye contact, a calm, quiet approach, and projecting sympathy or kindness. By touching their patients, three nurses (23%) felt they could communicate caring. Only one nurse in the sample included listening in her nonverbal strategies.

Verbal strategies were primarily directed at orientation of the patient. They included: reassuring, repetition, explanations, simple commands, discussing current events, or reminding patients about their family members. One nurse stated that she used open-ended questions only when she had time to talk, otherwise, she relied on closed questions. Encouraging the patient to problem-solve and make his or her own decisions was never considered by any of the nurses. Some of the verbal strategies employed were those not recommended when communicating with patients who were confused. Four of the nurses (31%) said they often supported confused older patients in their disorientation. That is, they sometimes

would "go along" or "play along" with the patients' confusion. Another nurse said she used her "standard lines", and still another said she sometimes "ignored" the patient. Not getting angry at the patient was the strategy of one nurse.

The promotion of emotional comfort was not a priority for nurses. However, four of the nurses (31%) mentioned that they would try and reassure their patients. The enhancement of self-image was considered by two nurses from opposite perspectives. One nurse said she would, "try and maintain her sense of self-worth", while another nurse commented, "It's hard not to treat them like children".

5.5.1.2 The Family

Some of the verbal communication strategies were placed in the family category. Interventions involving the family fell into three categories. The nurses (69%) would enlist the family's help to sit with and try to calm the patient. This strategy was often observed by the investigator while conducting research on the orthopedic/general surgery ward. Four nurses (31%) felt it was important to keep the family informed about the patient. This information included: explaining the reason for the restraints, and reinforcing the fact that the confusion was temporary. Two nurses (15%) would offer support and reassurance to family members.

5.5.2 Physiological Interventions

Nurses were primarily concerned about the physical aspects of care. The physical comfort of the patient who was confused was a concern for five (38%) of the nurses. They suggested such measures as: back rubs, analgesics, and a quiet, dark environment. Preventing complications and promoting physical well-being were concerns of four nurses (31%). They stressed nutrition, ambulation, and prescribed treatments.

As was previously stated, the patient's safety was a major concern, particularly to the ICU nurses. Seven of the nurses (54%) mentioned such safety measures as: putting the patient in a Gerichair to prevent falls; keeping confused patients out in the hall during the night so they could be watched; checking on them frequently; monitoring bed rails; and removing tubing as soon as possible.

Although most of the orientation was accomplished through communication, two of the nurses attempted orientation by showing the patient their hospital environment. One nurse showed her patient the incision, while the other walked her confused patient in the corridors and pointed out other patients and hospital equipment.

5.5.3 Controlling Measures

Restrictive measures to control behavior were widely accepted by the nurses. Eight of the nurses (62%) would use restraints on the patient. They felt that this was the best means of preventing patients from falling and pulling out tubes. For four of these nurses (31%) the decision to restrain was not an easy one and they seriously debated the effectiveness of the restraint. Two of the nurses (15%) who advocated the use of restraints also relied on chemical restraints as well, such as antipsychotic medications. Notification of the doctor was recommended in order to have analgesics changed or further sedation ordered.

5.6 PATIENT FACTORS

5.6.1 Characteristics of the Confusion

Patient factors became the category which evolved from the question, "What factors determine how you communicate with a confused patient? Can you elaborate on any of these?". While some of the nurses mentioned environmental factors, the majority (77%) of the nurses were concerned about the nature of the patient's confusion. The confusion was a concern because it affected how much effort the nurse was willing to put into orientating and talking to the patient. If the confusion was such that the nurses felt

their communication was worthwhile, then sixty-two percent of the nurses would pursue the effort. One nurse said, "If it's worthwhile reorienting them you take more time".

The nurses had developed two classifications for the patients who were confused, "pleasantly" and "combative". Patients who experienced a mild form of temporary confusion and were not difficult to manage were called "pleasantly confused". On the other hand, a "combative" patient was one who was severely confused and agitated or violent. This was often the patient who was chronically confused. However, patients with acute confusion who were verbally or physically obstreperous were called "combative". Nurses would spend more time talking to and orienting a patient whom they termed "pleasantly" confused rather than a patient whom they described as "combative". Eight of the nurses (62%) used the term "combative" or chronic confusion. Only one of these nurses said she would try to modify her communication with a chronically confused patient and try and "work with their confusion". The others said that orientating them was not worthwhile as this example indicated, "combative isn't going to listen to what you tell them to do". There seemed to be a sense of hopelessness in the nurses' communication attempts. Therefore, the degree and nature of the confusion were instrumental in the communication attempts of the nurse.

5.6.2 Characteristics of the Patient

Sex, size, language spoken, acuity of the surgery, and the behaviors exhibited were briefly mentioned by four nurses (31%) as factors in the nurses' communication with confused patients. Confused patients who were acutely ill because of their surgery were more likely to have the nurse communicate with them than patients who did not require as many nursing interventions. Three of the nurses (23%) expressed fear at approaching certain confused patients because of size and unpredictable behaviors.

5.7 ENVIRONMENTAL FACTORS

5.7.1 Work Load

The setting had an impact on nursing care. Nurses were asked how they felt the conditions on their ward influenced communication with acutely confused patients. The heavy work load proved to be the major factor influencing how the nurse communicated with the acutely confused patient. Nine of the respondents (69%) stated that they would be able to spend more time communicating with patients if they weren't so busy.

5.7.2 Frequency of Confusion

The frequency of confused patients on a ward also influenced the nurses' communication. Since the orthopedic/general surgery ward had a high proportion of

very elderly people, acute confusion was a frequent occurrence. Nurses who worked there said they either became "lax" about caring for this type of patient or extremely frustrated. There was a high staff turnover rate on the ward. Two of the interviewed nurses who had transferred to another surgical ward noted that it was easier to nurse confused patients when there weren't so many of them. One of them said, "Your confused patients are fewer and further between. It's a lot easier to deal with them".

5.7.3 Physical Structure of the Ward

The two ICU nurses in the study commented on the fact that the physical structure of their unit influenced how they cared for the confused patient. Since the nurses could see the patient at all times, they felt they were better able to care for and communicate with their patient. On the wards, the situation was quite different. The nurses are able to see one patient from the nursing station on each of the units.

5.8 SUMMARY

The agreement between the nurses' verbal and written descriptions of the confused behavior and the Clinical Assessment of Confusion-II indicated that this was an accurate assessment guide. The five categories in the CAC-II provided adequate coding for the nurses' responses.

There was also agreement between the verbal and written responses and the operational definition of confusion for this study which had been provided by Williams et al. (1985b). The description of confusion offered by the nurses in this study resembled slightly the categories outlined by Wolanin (1977). Many of the descriptors in the "cognitive inaccessibility" category were appropriate for this study. Wolanin's category of "social inaccessibility" described a more violent, hostile type of confusion than was described by the nurses in this study. These descriptors may more accurately have described the chronically confused patients studied by Wolanin.

This interview was designed to explore the factors which impacted on the quality of the nurse-patient interaction. The nurse was the primary focus, of course. The responses from the interviews indicated that there were several key characteristics which affected the nurses' communication. These were: the nurses' perception of the patient, experience, and the influence of colleagues.

According to the responses, it would appear that all the nurses had an implicit understanding about the patient and the experience of being acutely confused. The nurses answered in general terms with no references to the specific experience of the patient they were caring for on the day of the interview. Nor was it apparent that the nurses had ever asked their patients about the experience of being confused.

Many of them tried to put themselves in the place of the patient and mentioned aspects that were important to themselves, such as: loss of control, loss of self-esteem, embarrassment, and social isolation. The nurses' reaction to the family's distress was also one of implicit understanding. They did not mention specific conversations with the family of the confused patient.

Experience was considered to be a positive influence in the care and communication of confused patients. This was especially true for the older nurses in the study. Almost half of the nurses in the study were greatly influenced, either positively or negatively, by the type of care given by their peers. Even though the nurses sometimes followed poor examples themselves, they tended to be very critical of the care given to the confused patient by their colleagues.

When told that the patient they were caring for was confused the primary concern of the nurses was the extra work and increased surveillance needed. These concerns were not surprising in light of a latter revelation that the majority of the nurses found caring for patients experiencing acute confusion mentally and physically exhausting. They said it made them impatient, frustrated, and unwilling to spend any time talking to patients who were confused.

The experience of relating to a family member who was confused had affected only one nurse. Education, beyond training school, had not made an impact on communication and care given by the nurses. In fact, most of the nurses said they had received little continuing education on communication and the care of elderly patients who were confused.

Apart from their goal to orientate the patients, most of the nurses projected physiological goals. These were: maintain physiological functions, ensure safety, promote physical comfort, and regain independence. The interpersonal goals of increasing understanding, promoting emotional comfort, and maintaining self-esteem received very few responses from the those interviewed. Except for the goal of orientation, interpersonal goals were a low priority in planning patient care.

The interventions proposed by the nurses reflected the physiological nature of the goals. Interventions which promoted safety and physical comfort, and prevented complications were important to the nurses. Various strategies to control the behavior of the patient were proposed such as restraints, drugs, directives from the physician, and enlisting the help of a family member to sit with the patient. The use of restraints was a generally accepted intervention, according to the majority of nurses. For half of these nurses, restraint use created a dilemma.

Since interpersonal strategies had been specifically elicited in the interview, a more detailed description of these interventions was provided. Verbal communication was necessary to: orientate the patient, assess the degree of confusion, and provide simple explanations and directives. Several of the nurses communicated reassurance. An alarming number of nurses used counterproductive communication strategies, such as: supporting the patient's confusion, standard lines, or ignoring the patient. Only seven of the nurses mentioned nonverbal strategies, which indicated that these were not as significant to the nurses as verbal ones. Few other interpersonal strategies were elicited.

From the interview responses, it would appear that communication was greatly influenced by the degree and type of confusion the patient was experiencing. Nurses reported that patients who were mildly acutely confused or "pleasantly confused" would orientate, however briefly. Since they had been successful, the nurses would continue their efforts to communicate. Conversely, patients who were "combative" or chronically confused and would not orientate would not receive repeated communication efforts by the nurse. It seemed that nurses had to have a sense that their communication was worthwhile, that is, the patient was becoming more lucid. "Combative" patients evoked feelings of frustration, fear, anger, and hopelessness.

Other patient attributes, such as sex and size, were seldom considered by the nurse when interacting with the patient.

Elements within the immediate environment were perceived to cause many problems for the nurses. The major concern of the ward nurses was their work load which allowed little time to communicate with patients. Observations made by the investigator on the orthopedic/general surgery ward confirmed the fact that the nurses were, indeed, busy most of the time.

It appeared that nurses who cared for confused patients frequently were more frustrated than those nurses who didn't. The physical structure of the wards caused some concern because the nurses were unable to see their patients. This was considered one of the advantages of the care in ICU.

Therefore, it may be concluded that the positive influences on the communication of the nurses were: experience, working with colleagues who demonstrated caring, a positive response from the patient to the nurse's efforts to orientate, infrequent numbers of confused patients, and the ability to see the patient at all times. The negative aspects of caring for patients who were confused were: the physical and mental demands of care, the perceived negative influence of colleagues who were abrupt with the patient or uncaring, "combative" or chronically confused patients,

heavy work load, frequency of confused patients, and the physical structure of the wards. The nurses' perceptions of the patients were those of implicit understanding.

CHAPTER VI

DATA ANALYSIS: NURSE-PATIENT INTERACTIONS

In this chapter the results of the analysis of the nurse-patient interactions are delineated. Demographic data of the patients and nurses are presented. A general overview of the nurse-patient interactions outlines the nature of the interactions and the characteristics of the nurses' speech. Both quantitative and qualitative analyses were undertaken. Quantitative analysis was used to present the nurses' nonverbal and verbal behaviors which were extrapolated from the list of communication strategies for confused patients. Using Kasch's (1984, 1986) behavioral functions coded in a hierarchical system, the investigator provided a qualitative analysis of the nurses' responses. The patients' communication, while confused, was coded in a response taxonomy.

6.1 CHARACTERISTICS OF THE POPULATION

6.1.1 Patient Sample

Thirteen patients (n = 13) participated in the study. There were nine females and four males ranging in age from 67 years to 90 years ($\overline{X}$ = 76, S.D. = 6.83). Eight of the patients (62%) were widows or widowers and five patients had living spouses. Seven of the patients (54%) had surgery for

repair of a broken hip or had a hip prosthesis inserted. Abdominal surgery had been performed on five of the patients, while one male patient had undergone a transurethral resection. For nine of the patients (69%), the surgery was unexpected. All of the patients wore glasses and three of the patients relied on a hearing aid.

The investigator examined the nurse's notes in order to record the onset of the confusion for the individual patients. The nurses had recorded the onset of confusion for four of the patients on the day of surgery. Six patients experienced confusion one day postoperatively; one patient on the second day postoperatively; and two patients on the third day after surgery. Scores on the VAS-C ranged from 1.5 to 10 ($\bar{X}$ = 5.42, S.D. = 2.66). The characteristics of the patients in this study have been presented in Table 6.1.

The behavior most frequently scored by the nurse when using the CAC-II to assess her patient's confusion was "not recognizing limitations of illness" (10%). Altered conceptualization (8%) and decreased ability to concentrate (8%) were the next most frequently scored behaviors. "Behavior regressed, repulsive, and/or repetitive" was also recorded frequently (7%). Only one nurse noted hypokinetic behavior in her patient. Although this manifestation of confusion had been identified in the literature (Foreman,

Table 6.1

Characteristics of the Patient Subjects

Sex	Age	Sensory Aids	Surgery	Onset of Confusion	VAS-C
F	90	Glasses	Hip Arthroplasty	DOS*	1.5
M	69	Glasses	TUR	1	8.0
F	67	Glasses	Hip Replacement	3	7.5
F	76	Glasses	Hip Arthroplasty	1	4.75
M	75	Glasses H. Aid	Hip Replacement	1	2.75
M	67	Glasses	Ventral Hernia Repair	3	4.5
F	81	Hearing	Incisional Hernia	1	8.25
F	77	Glasses	Hip Pinning	1	3.5
M	73	Glasses H. Aid	Sigmoid Resection	DOS	5.5
F	70	Glasses	Enterotomy	DOS	5.75
F	80	Glasses	Cholecyst-ectomy	DOS	6.75
F	80	Glasses H. Aid	Thompson's Arthroplasty	1	10
F	83	Glasses	Thompson's Arthroplasty	2	2.75

*Day of Surgery

1986; Lipowski, 1983), it was seldom assessed by nurses. The distributions of the CAC-II assessments have been presented in Table 6.2.

6.1.2 Nurse Sample

The thirteen nurses who cared for the thirteen acutely confused patients comprised the remainder of the sample population. The nurses, who were all female, ranged in age from 21 to 45 (X = 30.5, S.D. = 6.79). Only one nurse had a bachelor of nursing degree. The other twelve nurses graduated from a diploma program with one nurse having a bachelor of arts degree, as well. Nursing experience for these nurses ranged from one year to 26 years ($\bar{X}$ = 8.6, S.D. = 7.8). Number of years caring for elderly patients averaged 7.69 years. Most of the nurses in the sample had cared for elderly patients throughout their careers.

The nurses had received very little continuing education related to communication or to the care of elderly patients. Five nurses (38%) reported attending an inservice on the care of the elderly and two nurses (15%) had received inservice education on ways to communicate. Three of the nurses (23%) could not think of any continuing education they had received in these areas. During their formal nursing education, five of the nurses had been taught about care of the elderly and how to communicate. The number of shifts the nurse had cared for the same confused

Table 6.2

Distribution Of CAC-II Assessments

Behavior	Frequency of Assessment
Cognition	
Extreme forgetfulness	4
Forgetful	9
Decreased ability to concentrate	10
Altered conceptualization	10
General Behavior	
Noisy	1
Not recognizing limitations of illness	12
Restlessness	8
Difficulty relating to others	5
Antagonistic	4
Withdrawn	1
Irritability	7
Demanding	3
Apathy	2
Motor Activity	
Speech slurred	4
Altered voluntary motor response	5
Absence of any meaningful response	1
Altered involuntary motor response	1
Little body movement	3
Orientation	
No idea of place	5
Calling people from past	1
Calls someone known to him/her by another name	3
Psychotic/Neurotic Behaviors	
Delusional	4
Paranoid ideation	5
Talking to people not actually present	3
Behavior regressed, repulsive, and/or repetitive	8

patient ranged from .5 to 4 shifts ($\bar{X}$ = 1.9). The characteristics of the nurses in this study have been presented in Table 6.3.

6.2 GENERAL CHARACTERISTICS OF THE INTERACTIONS

Thirteen nurse-patient interaction transcripts were analyzed. Two hundred and forty-one minutes of nurse-patient interaction were recorded and transcribed. Length of the interactions ranged from 6 minutes to 30 minutes ($\bar{X}$ = 18.53, S.D. = 7.95). In three instances, the investigator was able to record only one interaction between the nurse and the patient. Since ward nurses often worked in pairs with a licensed practical nurse or a student, she might only have one or two interactions with a patient during an eight hour shift. In the ICU, it was easy to tape record several interactions because the patient only had one nurse caring for him or her during the shift. Seven of the recordings were completed on the evening shift, five on the day shift, and one during the night shift.

There were various reasons for initiating the nurse-patient interaction and it was usually the nurse who did so. Six of the nurses entered the patient's room to give direct nursing care, such as a bath, or to turn a patient. One nurse went into the room to teach the patient how to get out of bed for the first time since surgery. A patient attempting to crawl out of bed and a patient calling

Table 6.3

Characteristics of the Nurse Subjects

Characteristic		Number
Sex	Female	13
	Male	0
Age	20-25	3
	26-30	4
	31-35	4
	36-40	0
	41-45	2
Education	Diploma	12
	BN	1
	BA	1
Experience (Years)	0-5	5
	6-10	3
	11-15	3
	16-20	1
	>20	1
Experience With Elderly (Years)	0-5	7
	6-10	2
	11-15	3
	>20	1
Communication Workshops Attended		2
Workshops on Care of the Elderly Attended		5

out caused two of the nurses to initiate the interaction. Three nurses started talking to the patient when they went in to check on the student caring for the patient. One nurse began one of her interactions because her patient was picking at the air, but her subsequent interactions were initiated because of nursing care. Characteristics of the interactions have been presented in Table 6.4

There were approximately an equal number of nurse and patient "turns" in all the transcripts. However, the length of the "turns" often differed. In some of the interactions, the nurse had longer "turns" than the patient and in others, the patient tended to have longer "turns", depending on the nature of the interaction. If the purpose of the interaction was physical care, than the nurse would have longer "turns". Also, when a patient had a hearing deficit it was not uncommon for the nurse to repeat herself several times during a complete turn thus lengthening her "turn".

There were 1420 nurse "turns" recorded. These "turns" were further broken down into sentences and clauses. Nurses asked their patients a total of 502 questions (35%), 60 of which were open ended. Many of the open-ended questions were the general salutation, "How are you feeling?". Since nurses ask questions to assess the extent of the patient's confusion, the investigator decided to examine what proportion of the questions were asked to assess confusion. An example of a question to assess confusion would have

Table 6.4

Characteristics of the Nurse-Patient Interactions

No.	Length	Purpose	Shift	Place
1	6 Min.	Turn patient	Evening	Ward room
2	30 min.	Physical care & to calm patient	Evening	Ward room
3	25 min.	Bath & tray set up	Day	Ward room
4	15 min.	Turn patient	Evening	Ward room
5	17 min	Teach patient to get out of bed	Day	Ward room
6	20 min.	Pt. crawling out of bed	Night	Ward room
7	27 min.	Pt. called out	Evening	Ward room
8	8 min.	Check student	Day	Ward room
9	21 min.	Pt. picking at the air/Walk pt.	Evening	ICU
10	9 min.	Check student	Evening	Ward room
11	13 min.	Check student	Day	Ward room
12	28 min.	Bath & change dressing	Day	ICU
13	22 min.	Physical care	Evening	Ward room

been, "Do you know where you are?". There were 162 questions related to confusion assessment or 32 percent of the total number of questions. Commands were not nearly as frequent as questions. Nurses gave simple commands such as, "Don't touch that tube, dear." a total of 130 times (9%). It was interesting to note the number of times nurses changed the direction of the conversation. In total, 83 changes in the conversation were recorded. An example of such a change was as follows:

P: Well that won't help me if I can't get into the car.

N: X I'm going to poke your finger to check the blood sugar, OK.

P: Yes.

N: Remember you told me you did this at home.

Many of the examples of the changes were similar to the example given above. The patient would be hallucinating, disoriented, or rambling and the nurse would interject with a question or statement about the physical aspects of care. This behavior was consistent in twelve of the thirteen interactions. The nurse who did not redirect the interaction always listened to the patient and tried to clarify what he was saying.

In most cases, the nurses in this study had control of the interactions. They were the ones who initiated the nurse-patient interaction and often controlled the length of

the conversation. They also controlled the interaction by redirecting the patient's conversation and maintaining the direction whenever possible. A high proportion of closed questions characterized the interactions.

6.3 COMMUNICATION STRATEGIES FOR THE CONFUSED PATIENT

6.3.1 Nonverbal Strategies

The list of communication strategies for the confused patient which was developed from references in the literature was divided into verbal and nonverbal strategies. The nonverbal data were taken from the Nonverbal Behavior Checklist and the tape recordings of the nurse-patient interactions. Observations of expressive touch, eye contact, interpersonal distance, verbal pacing, voice tone, facial expression, and posture were recorded. In one instance, the nurse would not allow the investigator to observe her interaction so only pacing, posture, and distance were reported. The findings have been presented in Table 6.5.

Except for one nurse, all nurses touched their patient expressively during the interaction. Five nurses (38%) frequently touched their patient, usually on the shoulder, arm, or hand. Nurses were seen stroking the forehead of patients and one nurse held her patient's hand. In this case, the patient was very anxious and concerned about her confusion.

Table 6.5

Nonverbal Communication Strategies of Nurses

Touch	Eye Contact	Distance	Facial Expression	Posture
Frequent	Always	1.5'-2'	Relaxed Occ. Smile	Stand Leans
Frequent	Always	2'-3'	Concerned Never Smile	Sit & Stand Leans
Seldom	Usually	1'-2'	Relaxed Seldom Smile	Stand
Occasion	Usually	1.5'-2'	Relaxed Freq. Smile	Stand Leans
Seldom	Always	2'	Sl. Tense Occ. Smile	Stand
Seldom	Always	2'	Sl. Tense Never Smile	Stand
Frequent	Always	1.5'-2'	Relaxed Freq. Smile	Sit & Stand Leans
?	?	2'	?	Stand
Frequent	Always	1.5'-2'	Relaxed Freq. Smile	Sit & Stand Leans
Occasion	Usually	1.5'-2'	Relaxed Occ. Smile	Stand Leans
None	Always	1.5'-2.5'	Relaxed Occ. Smile	Stand Leans
Occasion	Always	1.5'-2'	Concerned Never Smile	Stand Leans
Frequent	Always	1'-2.5'	Relaxed Freq. Smile	Stand Leans

Eye contact was maintained during all or most of the interactions by all nurses. Nurses lost eye contact when they were performing a nursing procedure on the patient. However, when nurses were conversing directly with the patient, eye contact was maintained. One nurse actually asked her patient to open her eyes while she was talking.

The nurses appeared fairly relaxed while communicating with their patients. When patients were upset or constantly climbing out of bed, the nurse's facial expression became more tense or concerned. All the nurses nodded their heads as they talked to the patient and one nurse used frequent hand gestures. During the interaction, many of the nurses smiled or laughed as the situation demanded. Patrick (1967) had recommended speaking slowly and deliberately to patients when they are confused. Slow, deliberate speech pacing was evident in only one interaction to a patient with a known hearing deficit. The rest of the nurses followed their usual speech patterns. Except for one nurse who tended to speak quickly, all nurses spoke distinctly and with adequate volume. The voice tone of the nurses was calm and reassuring. On three occasions, the nurses' tone became very soothing as their patients became more agitated. In only one instance, did the nurse's voice tone become somewhat threatening for a command.

All nurses maintained a close interpersonal distance, ranging from one foot to two and one half feet from the patient. For the most part, patients were lying in bed during the interactions except two sat up in the chair for awhile. Therefore, the nurses remained standing for most of the interactions. Three nurses sat for part of the interaction. Nine of the nurses were observed leaning towards their patients, an attribute of attending behavior.

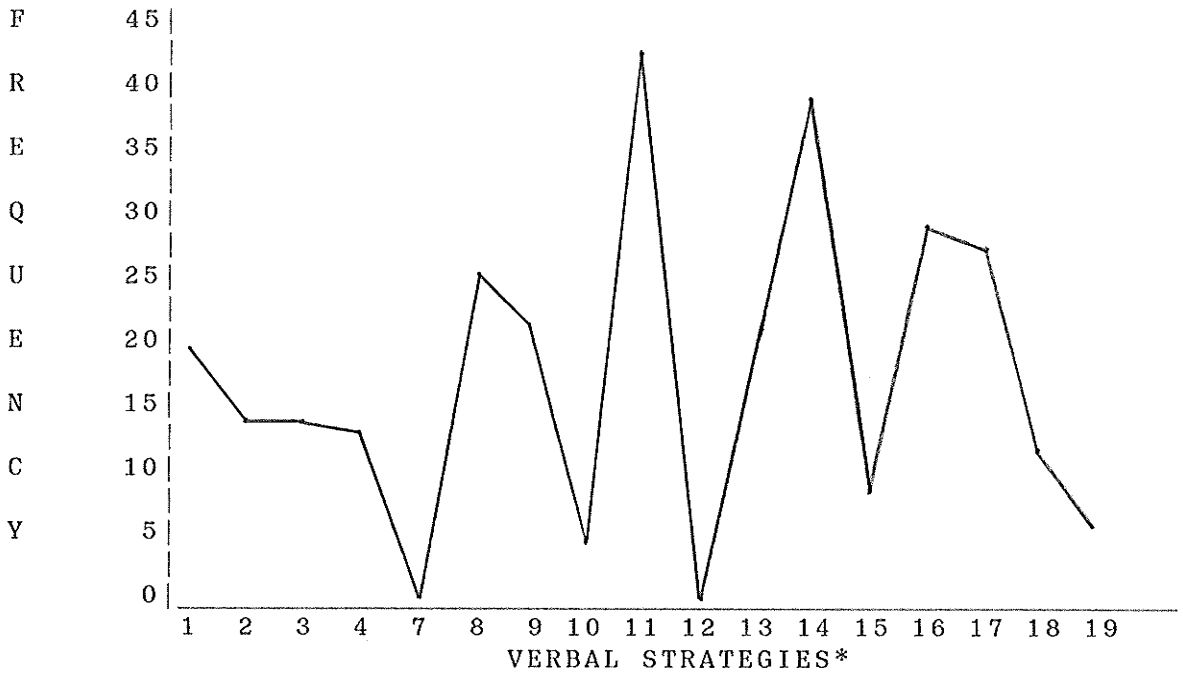
6.3.2 Verbal Strategies

There were 19 verbal communication strategies for patients who are confused extrapolated from the literature. Each strategy was assigned a number. Whenever the investigator noted a strategy on the nurse-patient interaction transcripts, the corresponding number of the strategy was affixed to the response. The frequencies were tabulated, totalled and have been presented in Figure 6.6

A total of 294 verbal communication strategies were recorded in the 241 minutes of nurse-patient interaction ($\bar{X}$ = 1.2). Since the interactions were of varying lengths, individual totals were achieved by calculating the number of strategies per minute of interaction. The nurses scores ranged from .6 strategies per minute to 2 ($\bar{X}$ = 1.18). Six of the nurses had lower scores than the average per minute.

Figure 6.6

Verbal Communication Strategies Used By Nurses When Communicating With Confused Patients



* 1 Explain the setting including equipment.
2 Reinforce reality oriented behavior such as current events.
3 Emphasize the patient's competencies.
4 Remind the patient about what she or he is able to do.
**5 Call the person by preferred name.
**6 Encourage discussion about objects in the patient's room that refer to the patient's past.
7 Encourage life review.
8 Ask if the patient is experiencing any pain.
9 Involve patient in decisions about his or her care.
10 Listen carefully & seek more information if patient is hallucinating.
11 Reality must be constantly and calmly described.
12 Find out what the patient fears.
13 Orient the patient to time & day.
14 Orient the patient to place.
15 Introduce yourself and your position.
16 Promote personal identity by addressing the patient by name.
17 Refer to patient's significant others.
18 Keep patient informed of his or her physical progress.
19 Refer to any internal reference points such as former occupation, hobbies.

**No responses in these categories.

Nurses most frequently described reality to their patients (14%). Seven of the patients in the study were hallucinating at the time of the interaction which may have accounted for this high rate. The nurses would make comments such as:

N:You feel like it does, dear, (wall moving) but in reality it's not moving at all.

N:There isn't going to be a truck or car come and hit anything.

Yet, one of the most important strategies a nurse can employ for a confused patient who was hallucinating, that of listening carefully and seeking more information, was seldom recorded in this study (1%). There were several instances where the nurse did not listen to what her patient was saying and blocked further elaboration by changing the flow of the conversation. One man had booked a trip to Hawaii and had made a down payment of one thousand dollars. The doctor had assured him that he would be out of the hospital and able to go on the trip, but this was not the case. According to the patient's son, the man was very upset about missing the trip and losing the money. The conversation with the nurse went like this:

P: Oh God, I can't. We got leave for the 27th. We're booked for Hiaway [sic].

N: You have to just get better first. You'll be OK. Those tubes are still connected to you.

Dr. X will tell you when you can go.

P: We've got to know that day or I'll lose over a thousand dollars

N: Whose going with you?

P: The whole family's going.

N: Oh, did they go for supper.

There was another example. During the admission interview, another patient had expressed to the nurse her concern about her disabled husband who was in a long-term care institution. In her confused state, the patient believed her husband had died. The conversation between the nurse and this patient went as follows:

P: My husband's been dead all this time.

N: No dear, I don't believe so.

P: I'm going home so I can ?????

N: You let go of the rail, dear. Now we'll just turn you and sit you up.

These two examples illustrated that nurses sometimes did not listen to the concerns of the patient and did not use communication to facilitate elaboration of the anxieties of the patient. In both cases, the nurse pursued her own communication agenda.

Since 10 of the 13 patients indicated through their conversation that they were disoriented to place, it was not surprising that the second most frequent communication strategy used by nurses was to try and orient the patient

to place (13%). Six of the patients were disoriented to time and this orientation was frequently attempted by the nurses (7%).

In an acute surgical setting, it would be expected that the nurses would be concerned about the pain a patient experienced. With the exception of two nurses, all the nurses asked if the patient was experiencing any pain. It would also be expected that the nurses would inform the patient about his or her progress, but this was not the case. Only three percent of the communication strategies were references to the progress the patient was making.

Most of the nurses allowed the patient to make simple decisions about his or her care (7%). Patients were allowed to decide whether to: leave dentures out or in, walk or stay in bed, and so forth. Two of the nurses in the study asked their patients if they would mind having the restraint on to protect themselves. Both of these patients let the nurse make the final decision. At least some of the patients were given a choice, others were not. For example:

P: Why do I have to get washed when I'm going home? I already am washed.

N: The hospital is a funny thing. I feel guilty if everybody doesn't have a scrub before I go home at four. So I start early in the morning and I do the best I can in the morning, OK.

Exploring the patient's history was neglected by most of the nurses. Nurses did not encourage patients to talk about or to review the past. Internal reference points of the patient, such as a former occupation or hobbies were seldom mentioned. If, in fact, the nurses did encourage the patients to talk about themselves it was usually about continuing events in their present lives or about their significant others (9%).

The list of communication strategies for the confused patient provided a useful pre-coded framework for the quantitative analysis of the nurses' interaction. The overall impression was that nurses were primarily concerned with the physical aspects of care and the general orientating statements for patients who were confused. They did not focus on the individuality of the patient. Several of the strategies on the communication list focused more on the individual. These were: listening and seeking more information when the patient was hallucinating, encouraging life review, seeking more information about internal reference points, and emphasizing the patient's competencies. When these strategies were extrapolated from the data, they accounted for only eight percent of the total.

6.4 HIERARCHICAL CODING SYSTEM FOR NURSE INTERACTIONS

By undertaking a content analysis the investigator identified open-ended clauses and sentences spoken by the nurses which could be placed in one of the five behavioral function categories proposed by Kasch (1984, 1986). Once in the functions, the responses were then coded according to the categories and subcategories outlined by Kasch and Lisnek (1984). An interrater reliability of .96 was achieved in the coding of the behavior functions. However, coding the categories and subcategories presented greater difficulties. After two attempts at establishing discrete definitions an interrater reliability of .78 was obtained. If the rater's score and the investigator's score were within one subcategory in the same category an interrater reliability of .88 would have been achieved.

6.4.1 Behavioral Functions of the Nurse

Defining characteristics were established for the five behavior functions. All communication which was intended to help modify the patient's behavior or attitude was entered into the influence function. A statement such as, "You need the nurses here to help you." was an example of the nurse attempting to modify the patient's behavior.

Into the relational function, the investigator placed any statements which made reference to the nurse-patient relationship or were used by the nurse to control or modify

the relationship. Statements which indicated how nurses established, maintained, or terminated the relationship were incorporated. This category had the fewest entries. Entries in this function were primarily introductions and terminations of the interaction. Because of the nature of the data collection, many of the introductory statements were not recorded. The nurses did not reintroduce themselves or try to re-establish the relationship each time they entered the patients room, even though this had been recommended when caring for patients who were confused (Nowakowski, 1985).

In the comfort category, statements were placed in which the nurse: allowed the patient to express fears; expressed concern for physical comfort; or gave the patient reassurance and support. Also included, were any statements which provided feedback on the patient's feelings. An example of a statement included in this category was, "There's nothing to be scared of at the moment, is there?". Many of the nurses responded with closed questions about the patient's pain or other aspects of comfort which were impossible to code.

All statements which provided the patient with facts about a particular situation or information to increase understanding were included in the instructional or informational category. Also included, were questions which the nurse used to elicit information from the patient so

that she could make a nursing diagnosis. Statements and questions such as these were infrequent. In one interaction, the majority of responses were in the information function because the nurse had specifically entered the patient's room to teach him how to get up in the chair for the first time since the operation on his hip.

Statements which created a positive self image for the patient, such as: respect, esteem, autonomy, and a feeling being liked by the nurse were included in the identity category. An example of this was, "No, you didn't do anything wrong. You've been great". Any responses which made reference to the patient's roles in life were placed in this category. Unfortunately, many of the statements which addressed the patient's role were closed questions, such as, "How many children do you have?" and could not be coded. The patients in this study were never asked to elaborate on previous occupations, hobbies, or interests. The investigator also included any statements the nurse made about the patient's confusion in this category because it was felt that the confusion was a very real threat to the patient's identity. An example was, "It's nice to have you back with us. You've been a little bit confused the last couple of days".

6.4.2 Coding Results

6.4.2.1 Overall Results

Each sentence or clause within the behavioral categories was coded by the investigator into the hierarchical coding system using the outline presented by Kasch and Lisnek (1984). Suggestions for evaluating position- and person-centered behavior which were presented in the research reported by Applegate and Delia (1980) were also adopted. There were three main categories to which a number has been assigned. Within each category, were three subcategories with ascending levels of person-centeredness. These subcategories were assigned a letter.

Within Category 1, behaviors which relied on the power inherent in the role of the nurse were placed. Category 1A included all responses which criticized or disregarded a patient's feelings. Coercion may be used. Category 1B included all statements which relied on the patient's recognition of the power inherent in the status of the nurse. The nurse used commands, directives, and stated what the patient ought to do. Category 1C included statements of the rules and general goals of treatment. Statements of the nurse's role and what she would do for the patient were also placed in this category.

Responses in Category 2 indicated an implicit understanding of the patient by the nurse. Category 2A incorporated all statements which recognized the patient's

power of reasoning, simple explanations, and approval for nursing care. Statements which allowed the patient to make yes/no decisions were placed in this category. The needs of the nurse were central. More elaborated explanations, which included consequences of action, were coded in Category 2B. Psychological characteristics of the patient were still implicit but the patient was allowed to express concerns in a limited way with no elaboration. Statements which offered encouragement but no motivation were included. Category 2C incorporated all statements which recognized the interpretive powers of the patient. Decisions gave the patient a limited chance for control.

Strategies coded in Category 3 demonstrated that the nurse recognized the patient as a unique individual. Statements in Category 3A were those in which the nurse showed an awareness of the psychological qualities of the patient and allowed the patient to express concerns in an open-ended manner. The nurse encouraged capabilities and motivated the patient to participate in activities. The patient was allowed to set goals. In Category 3B, were placed any statements which helped the patient understand the relationship between his or her psychological state and behavior. The patient's feelings were used as a basis for action. All strategies which encouraged the patient to

engage in self-attribution, or to verbalize thoughts, feelings, and motives were included in the final subcategory, 3C.

A total of 314 responses were coded. Responses by function were: 68 influence, 33 relational, 75 comfort, 70 information, and 68 identity. The high proportion of closed questions recorded in the nurse interactions would account for the small number of coded responses. This was especially true of responses which were categorized within the comfort function. Kasch and Lisnek (1984) had suggested using only open-ended data. The relational function had few responses because it was difficult to find anything more than a statement of fact, that is, the nurse introducing herself. Between the other four functions there was little difference in the number of responses. The distribution of responses in the categories and subcategories has been presented in Table 6.7.

As the results in the table indicated, 93 (30%) of the responses were recorded in Category 1 where the perspective of the patient's individuality was subsumed. The majority of the responses were in Category 1C. One hundred and eighty-nine (60%) of the responses were tabulated in Category 2 which indicated an implicit understanding of the patient's feelings and a recognition of the patient's reasoning ability. The responses in this category were almost equally divided between the three subcategories.

Only 32 (10%) of the total responses were located in Category 3 which indicated a recognition of the subjective perspective of the patient. Most of the responses were tabulated in the lowest subcategory, 3A, indicating that nurses were seldom able to demonstrate a communication approach which incorporated the psychological state of the patient.

Table 6.7

Distribution of Hierarchical Coding Responses

FUNCTION	CATEGORY 1			CATEGORY 2			CATEGORY 3		
	A	B	C	A	B	C	A	B	C
Influence	16	19	20	5	3	5	0	0	0
Relational	1	1	4	10	12	4	1	0	0
Comfort	0	4	9	21	19	15	6	1	0
Information	1	4	10	19	23	12	1	0	0
Identity	1	1	2	10	16	15	20	3	0
SUBTOTAL	19	29	45	65	73	51	28	4	0
TOTAL		93			189			32	

The majority of the responses (59%) coded in Category 1 were in the influence function. Nurses used coercion, commands, directives, and rules of behavior. Examples of this were found in statements such as: "You're just going to stay put" and "Well dear, you're not going home". Of the total number of responses in Category 2, only 7% were in the influence function. There were no influence responses in Category 3. These results indicated that nurses exercised role power to control the sometimes erratic behavior of the confused patient, rather than persuasive patient-centered methods.

Since there were few responses in the relational function, it was difficult to generate any meaning from the results. For the most part, nurses were concerned about the establishment of a rapport with their patients. Of the 33 responses in the relational function, the majority were coded in Category 2.

The majority of the responses coded in the comfort function were in Category 2 and Category 3. It should be noted, however, that a high proportion of these responses (25%), were the result of one interaction. In this case, the nurse had performed several painful procedures and was very concerned about the patient's comfort. Overall, it would appear that nurses did try to understand the patients' perspective in providing physical comfort.

Scores in the information function indicated that nurses tried to give information using elaborated explanations and a few nurses tried to integrate the patient's situation in the explanation. Seventy-seven percent of the responses in the information category were coded in Category 2. There were fewer responses in Category 2C and only one response in Category 3. Therefore, nurses gave patients information which the nurse thought the patient needed without incorporating aspects which were unique to the individual. Nurses still tried to relate information to rules as was apparent in the ten responses in Category 1C.

Nurses adopted a more person-centered approach when they were trying to maintain a valid identity for the patient. Responses in the identity function were primarily coded in Category 2 or Category 3. Only four percent of the total responses in Category 1 were placed in the identity function while 22% of all the responses in Category 2 were from the identity function. There were 23 identity responses coded in Category 3. These results indicated that nurses made a conscientious effort to implicitly understand how the patient must feel when confused and a few nurses sought explicit understanding. An example of the latter type of understanding was demonstrated by a nurse when a patient was becoming very upset with an imaginary person she commented, "I don't understand what's the matter. What

are you fed up with?". Many of the nurses attempted to involve the patients in their care and offered encouragement when the patients were able to participate.

6.4.2.2 Individual Results

An examination of each nurse's communication strategies was undertaken. Two of the interactions were eliminated from the examination because both had fewer than five coded responses. These nurses both relied primarily on closed questions when communicating with their patients. Therefore, the responses of eleven nurses (n = 11) were examined. The number of coded responses for the individual nurses ranged from 15 to 50 ($\bar{X}$ = 27.9).

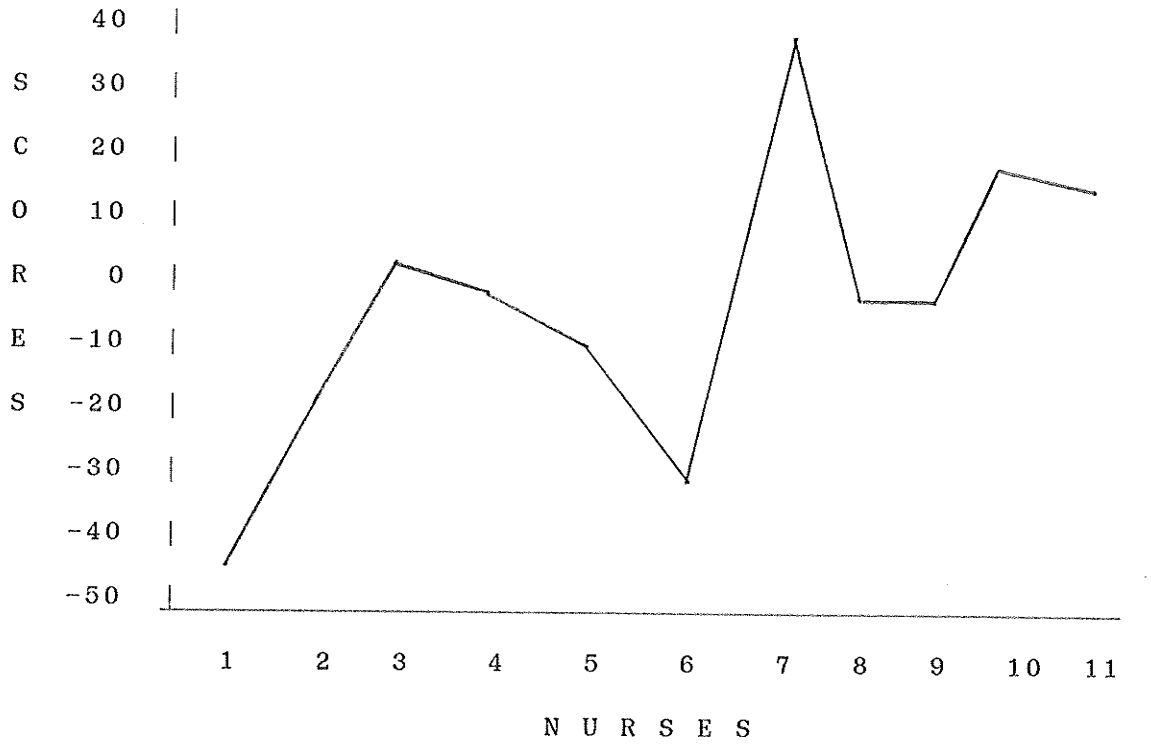
As stated in Chapter IV, numbers were assigned to the subcategories to facilitate presentation of the data and because there was such extreme variation in the number of coded responses. The numbers ranged from -4 in Category 1A to +4 in Category 3B. There were no responses in Category 3C. Therefore, nurses who had the majority of their responses above Category 2A would have a positive score. The scores have been presented in Figure 6.8

The scores ranged from -46 to +37 ($\bar{X}$ = -4, S.D. = 23.04). As was apparent from the results, most of the values were tabulated in the negative mode. Seven out of the eleven nurses recorded a negative value. These negative values indicated that the majority of the nurses' responses

were lower than Category 2B. This meant that the nurses used primarily position-centered speech. Four of the nurses demonstrated positive values with scores of: +1, +15, +18, and +37. These nurses used a greater number of person-centered communication strategies than the other nurses. For most of the nurses, scores could have been higher if the values in the influence function had been eliminated. Each score was further divided by the minutes of interaction per individual nurse. Scores ranged from -1.53 to +1.76 ($\bar{X}$ = -0.14).

Figure 6.8

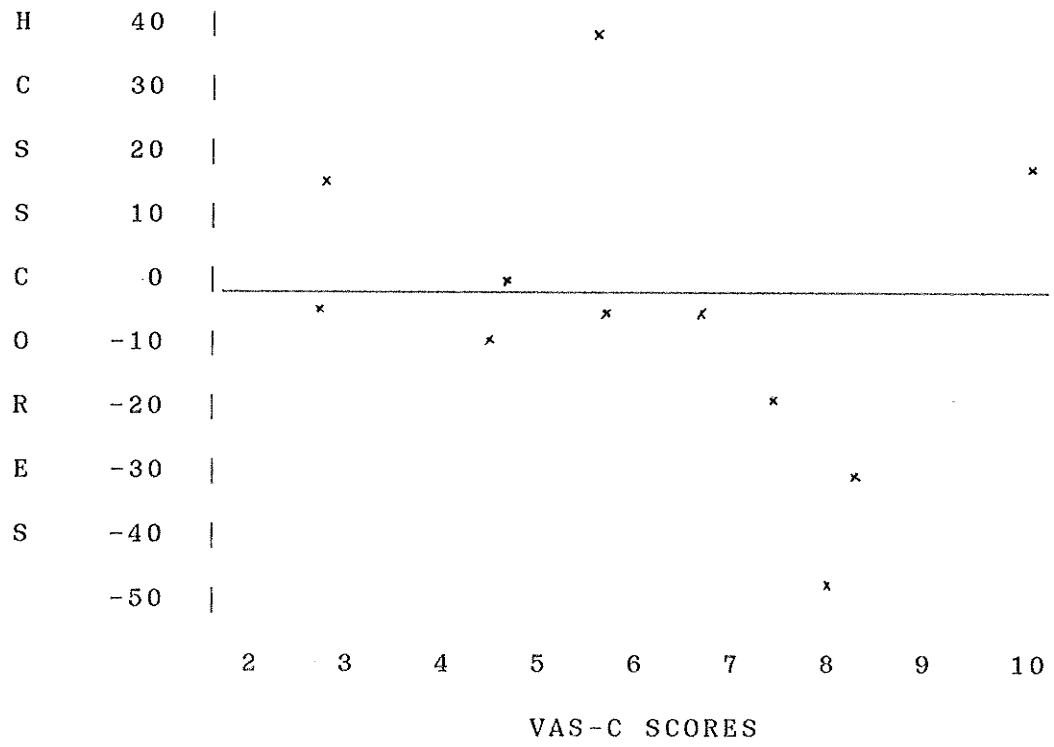
Distribution of Individual Hierarchical Coding Scores



The values of the individual hierarchical coding scores before they were divided by the minutes per interaction and the values of the VAS-C were subjected to statistical analysis. A correlation coefficient of -.30419 indicated a weak negative relationship between the values. This meant that the high values on the VAS-C were mildly associated with the low values on the hierarchical coding system. If the two highest positive scores on the coding system were removed, a stronger correlation would been evident. The results have been presented in Figure 6.9.

Figure 6.9

Relationship Between Individual Hierarchical Coding Scores and VAS-C Scores



The investigator compared the results of the individual coding scores and other individual characteristics of the interaction but could find little basis for comparison. The nurse who scored the highest positive score on the hierarchical coding system was also the nurse who did not change the flow of the conversation. One of the nurses whose score was not coded because of the frequency of closed questions was the one who would not allow the investigator to observe her interaction. The lowest score on the communication strategies for confused patients was obtained by the nurse with the second lowest score on the hierarchical coding scheme, who also recorded the highest number of changes in the conversation. Other than these few scattered associations, there was little relationship between communication characteristics.

The hierarchical coding scheme was used to evaluate the position- or person-centered behaviors of the nurses. The responses were equally distributed in the influence, comfort, information, and identity functions. It was found that the majority of the responses were clustered in Category 2 which indicated that the nurses in the study had an implicit understanding of the patient. Few sought an explicit understanding of their patient's motivations, fears, and feelings. The alarming feature in the overall results was that many of the nurses still relied on role or position power in their interactions with acutely confused

patients. This was particularly evident in their attempts to control the patients' behavior. When trying to sustain a patient's valid identity, however, nurses relied more on person-centered communication.

Individually, the nurses demonstrated a wide variation in interaction abilities. These scores gave a clearer indication that the majority of the nurses used position power or based responses on a limited understanding of the patient's experience. Four of the nurses had scores which indicated the beginnings of a person-centered approach.

6.5 PATIENT COMMUNICATION

The transcribing of the patients' interactions presented many problems. Not only was the speech of the confused patient very repetitive and illogical in syntax, but it was also rambling, mumbled, and very difficult to hear on the tape. Lipowski (1983) described the speech of the acutely confused patient as repetitious, hesitating, slurred, disjointed, circumlocutory, and paraphasic. Therefore, all or parts of a patient "turn" may have been excluded from the transcripts. Once these difficulties were overcome, a content analysis was undertaken which highlighted sentences and clauses that reflected the emotions, concerns, thought processes, and relationships of the patients. These were organized into a response taxonomy. The taxonomy has been presented in Figure 6.10.

Figure 6.10

Taxonomy for Patient Communication

1 In Touch With Reality

- 1.1 Physiological concerns
  - 1.11 pain
  - 1.12 hydration & nutrition
  - 1.13 sleep
  - 1.14 breathing
  - 1.15 hygiene
  - 1.17 other
- 1.2 Social concerns
  - 1.21 family
  - 1.22 physicians

2 Out of Touch with Reality

- 2.1 disorientation
- 2.2 confusion
- 2.3 hallucinations
  - 2.31 insects and other creatures
  - 2.32 death/injury
  - 2.33 capture
  - 2.34 imaginary people and things

3 Relationship With Nurse

- 3.1 Anger
  - 3.11 confinement
  - 3.12 integrity threatened
- 3.2 Mistrust
- 3.3 Resistance
- 3.4 Resignation

6.5.1 In Touch With Reality

Acutely confused patients experienced many of the concerns common to other postoperative patients. In this regard, they were in touch with reality. The physiological concerns of pain, the need for sleep and food were expressed by many of the patients. Three of the female patients were concerned about their general hygiene. The category coded as "other" included any reference to physiological concerns such as voiding. Physiological concerns were dominant throughout many of the patients' interactions. Patients would constantly return to discussions about physiological concerns. The woman who was not allowed to eat for many days was concerned about food. Disrupted sleep patterns resulting from the confusion were a concern for three of the patients. Four of the patients mentioned the pain. The expression of these physiological concerns differed from those of a lucid patient in the degree of repetition. This was a function of the short term memory loss which distinguishes acute confusion. Lipowski (1983) noted that the registration, retention, and retrieval aspects of memory were all impaired in patients experiencing acute confusion.

Patients also clung to reality by calling people who were familiar to them. These people were most commonly family members and doctors. Five of the patients mentioned or asked about a family member. The patients were aware of their doctors and the role of the doctor in the surgery or

recovery. Doctors were never mentioned in anger even by the man who missed his trip because of the surgery. He merely said, "Well, it's too bad. I asked if I should cancel my flight and he said, `No, no'".

6.5.2 Out Of Touch With Reality

The patient's cognitive impairment was reflected in three main categories, which were: confusion, disorientation, and hallucinations. When questioned by the nurse, five of the patients indicated that they were confused. They uttered such statements as: "I'm not just imagining it am I?"; "Yah, I've been a little mixed up at times"; or "I'm so befuddled".

Many of the patients in the study were disorientated to place. They would not believe they were in hospital and couldn't understand how they got there. One man thought he was in an ambulance garage, another in a hotel, and two women believed they were in the nursing home. Four of the patients mentioned that they were confused about their rooms and room numbers. All of these patients were located on the ward where patients were frequently moved from room to room because the units have different levels of care.

The third cognitive category delineated the hallucinations experienced by seven of the patients (54%) at the time of the interaction. Patients saw imaginary faces and people known to them. They also saw worms, flying bees,

insects, and red spots. Some of patients expressed concerns about being hit by a truck, falling out of an airplane, being kidnapped, and moving walls. Although one would expect patients to be afraid of the images in their hallucinations, this was not apparent from their actions and facial expressions. Two recovering patients were questioned about their experience of being acutely confused. They said how real the hallucinations were but did not describe them as frightening.

6.5.3 Relationship With The Nurse

The patients' relationship with the nurse was somewhat acrimonious, at times. Patients expressed; anger, mistrust, resistance, and resignation. Since most of the patients in the study were in either wrist or jacket restraints or both, it was not surprising that they became angry when the nurse would not take them off. An example of this:

P: Won't you take off these things? They're strangling me.

N: We will, with breakfast, OK.

P: I'll warn you.

One of the patients called his restraint jacket a padlock and wanted it removed. It had been charted in the nurse's notes that he had been crying and was embarrassed to have to be tied up.

It seemed to the investigator that many of the nurses' actions and communications were perceived as a threat to the patient's integrity. One woman shouted, "I know it's not moving but I'm not that dumb". One nurse had questioned one man's need for the bedpan. He replied indignantly, "I don't ask for it after I need it." Other patients became very upset at the actions of the nurse as this example showed:

P: One of the nurses said to the other one, "Oh he's been a nuisance. We'll put the pressure on him this time" and I didn't like that.

N: Yah.

P: That wasn't a very nice thing to do to an old man who isn't well.

Nurses also threatened the patient's integrity by their communication which caused this patient to became very irate:

N: Where are ya?

P: For Christ sake don't start that again. I'm just a jitters.

N: Sorry, where are you, dear?

P: Oh my God! Please don't start it again.

Patients occasionally mistrusted the nurses' actions. One patient, in particular, questioned everything her nurse did because it wasn't the same as her doctor had told her. Her conversation went like this:

P: I'm going to tell Dr. X. I was in the hospital

a week and they don't pull??? That's enough.

I'm going to tell what you doing".

N: Oh.

P: I want you to go.

Resistance was presented in the form of demands and threats or by simply ignoring what the nurse had said. Four patients (31%) resisted their confinement and demanded to be released to return home, "I'm going home". It had been stated previously that nurses ignored the patients at times. The same could have been said of the patients as these examples demonstrated:

N: What meal did you just finish eating, Mr. X?

P: I don't know and I don't care

Another example:

N: You did very well.

P: Oh, I don't care. I don't care.

Other patients resigned themselves to the experience. Statements such as: "Why did this have to happen to me?" or "I've lost my confidence" indicated that the patients felt out of control and desperately needed help. One woman said, "I just have to put it in God's hands and have him look after me and whatever is going on". Several patients abdicated their decision-making powers. One patient when asked to make a decision about her care simply said to her nurse, "You do whatever you feel has to be done". Another

became philosophical saying, "They're not in my shoes and they walk in my moccasins so that they know that life is a little different".

In summary, the responses of the patients while they were confused were placed in a response taxonomy. It appeared that patients experiencing acute confusion attempted to communicate many of the same requests and concerns that they would if they were lucid. They were concerned about physiological functions, social relationships, and the care they were receiving. Patients indicated that they were out of touch with reality by: the recognition of the confusion, the disorientation, and the visual hallucinations. The relationship with the nurse was one of anger which seemed to be precipitated by the nurse not releasing the restraints and the perceived threats to the patients' integrity. There was also mistrust of the nurse and her actions. Patients either expressed resistance to the nurse or resignation. These findings were not surprising in that it was the nurse who was with the patient much of the time and, therefore, would be the recipient of the anger.

6.6 SUMMARY

The results of the quantitative and qualitative analyses of the nurse-patient interactions have been presented. Quantitative analysis was used to present the

general characteristics of the interactions and the nurses' nonverbal and verbal behaviors related to the list of communication strategies for confused patients. The coding of the responses into the behavioral functions and the hierarchical coding system comprised the qualitative analysis.

Thirteen patients experiencing acute confusion and the thirteen nurses caring for them comprised the sample. Although the nurse-patient "turns" were equal in length and number, it was the nurse who usually controlled the interaction by initiating the topics. Control was also exercised by the nurses as they frequently changed the flow of the conversations. It was noted that nurses asked a disproportionate number of questions, not all of which related to the assessment of the patient's confusion.

The analysis of the nurses' verbal and nonverbal behaviors as they related to the list of communication strategies for confused patients revealed that nurses demonstrated nonverbal strategies consistently. However, the nurses' verbal strategies were directed at the patient's confusion and physiological state. Strategies which promoted the individuality of the patient such as decision-making, life review, and information on internal reference points were poorly represented. Nurses also did not listen and seek further elaboration when the patient was hallucinating.

The hierarchical coding system was used to present the qualitative analysis of the nurses' interaction. Nurses' responses were clustered in Category 2 which indicated that they implicitly understood the patient but did not use communication to understand the patient as a unique individual. As well, the nurses employed positioned-centered communication to control the patients' behavior. When maintaining a valid identity for the patient, nurses used more person-centered communication. All but four nurses used position-centered speech strategies.

The patient's communication was presented in a response taxonomy. Physiological and social concerns demonstrated that the patients were in touch with reality. Patients showed that they were out of touch with reality by their confusion, disorientation, and hallucinations. An interesting finding was the patients' relationship with the nurse. Patients appeared angry because of the nurse would not remove the restraints and perceived threats to their integrity, mistrusted the nurse, resisted her, or resigned themselves to their fate.

CHAPTER VII

DISCUSSION, LIMITATIONS, AND IMPLICATIONS

In this chapter the findings of the study are reviewed and discussed in relationship to findings from previous nurse-patient interaction studies and related research. Although many of the limitations of the study had been discussed in a previous chapter, the salient limitations were again noted. The results of the study provided important implications for educators, practitioners, and researchers who are interested in communication and the welfare of elderly patients who experience confusion.

7.1 DISCUSSION OF THE FINDINGS

An exploratory study of nurse-patient interactions was undertaken using a triangulated methodology which included: tape-recorded nurse-patient interactions, participant observation, and open-ended interviews with the nurses. The conceptual framework, which was a theory of nursing action: skills and competency in nurse-patient interaction, provided the structure for data collection and analysis. Both quantitative and qualitative data analyses were undertaken.

The patient population selected for study was thirteen elderly patients who were experiencing acute confusion postoperatively. This group was an important population to

study since it has been predicted that as the population ages more older persons will be admitted to hospital. Acute confusion was found to be prevalent in hospitalized elderly patients. Effective nurse-patient interaction was considered to be an important aspect in the care of these patients. The purpose of this study was to explore the communication of both patients and nurses and to describe the nurses' perception of caring for and communicating with patients who are confused. The investigator also intended to seek relationships between the nurses' communication behavior and their perceptions of the confused patient.

Many of the characteristics in this patient population were similar to those found in other patients who experience acute confusion postoperatively. Lipowski (1983) noted that the aging process and hearing and visual impairments predispose the elderly to acute confusional states. All study patients were sixty-five years of age or older and all had at least one sensory deficit. Many of the patients in the present study were not prepared for surgery. Williams et al. (1985a) noted that elderly persons who experience a sudden traumatic event were at greater risk for acute confusion because they were unable to psychologically prepare for hospitalization. The onset of confusion in this study was consistent with the findings of other researchers (Williams et al., 1985a). The disproportionate number of

females in the present study was explained by the large number of patients who required repair of fractured hips and insertion of hip prosthesis. The physiology and longevity of females increased their chances for falls and broken hips.

There may have been an over representation of female diploma nurses in this study because this particular institution did not employ many baccalaureate nurses. This may have had some bearing on the findings. Although Haggerty (1987) reported no difference in the responses of senior students with varied educational backgrounds, the results of this study would question that finding. Two of the four nurses who demonstrated more person-centered behavior had additional educational preparation. Since male RNs were not employed by the study institution, it was impossible to describe their communication behavior. Kasch and Lisnek (1986) suggested that differences do exist between male and female communication patterns.

7.1.1 Nurse Communication

To answer the first research question, both verbal and nonverbal strategies of the nurse were examined. Many of the nonverbal aspects of communication were evident in the care provided by the nurses in this study. Nurses maintained eye contact, interpersonal distance, and spoke clearly with moderate pacing. Most of the nurses expressively

touched their patients which was an important aspect in the care of these patients (Burnside, 1973; Hollinger, 1986; Langland & Panicucci, 1982; Rosendahl & Ross, 1982). Since only one other interaction researcher reported on the touching behaviors of the nurse, it was difficult to make comparisons. Bartz (1986) reported that nurses seldom touched the patients. She believed that this was because the nurses wanted to maintain the role of teacher and provider. Thus, the role adopted by the nurse may have determined the extent of the nonverbal behavior. Nurses in the present study had indicated in the interviews and by the person-centered responses in the comfort function that they were interested in the care and comfort role. Nonverbal comforting may have been an intuitive response to the patients' agitated behaviors. However, Applegate and Delia (1980) suggested that persons who interacted more in the restricted or position-centered mode relied on nonverbal channels to express feelings.

As stated, few of the previous nurse-patient interaction researchers studied the nonverbal behaviors of the nurse. Based on verbal behaviors only, nurses had been criticized for social distancing from patients (Clark, 1983; Webster-Stratton, Glascock, & McCarthy, 1986). The nonverbal behavior of the nurses in this study did not suggest social distancing.

The quantitative characteristics of the nurse-patient interaction were consistent with findings in previous studies. Just as the findings in the present study demonstrated, other researchers have reported a high proportion of closed or factual questions (Clark 1983; Conant, 1965; & Webster-Stratton, Glascock, and McCarthy 1986). In the present study, an attempt was made to link the disproportionate number of questions to the nurses' attempt to assess the extent of the patient's confusion. It was found that nurses still asked far more closed questions than was necessary. It was noted that the patients sometimes became upset with the questions. Nowakowski (1985) had suggested that nurses often based their assessment of the patient's mental status by asking questions which are important to the staff but are not important to the patients. Clark (1983) noted that questions effectively blocked the communication of patients. In the interviews with the nurses in this study, several of them said they would sit and talk to the patient if they had time. Closed questions may have been used to save time. When used at appropriate times by the nurse, closed questions may have assisted the patients to focus their thoughts.

It was reported that nurses frequently changed the flow of the patient's conversation, thus, effectively blocking the patients' communication. Although Bradley and Edinberg

(1982) suggested that frequent topic changes indicated increasing anxiety on the part of the nurse, topic changes may have been a communication device used by nurses to control the conversation. Control was also evident in the use of position-centered communication to regulate or influence the patient's behavior. Bartz (1986) had suggested that nurses control communication by questions, topic persistence, and beginning a procedural activity. The subject of control has usually been addressed by who initiates the conversation. The findings in the present study were much more conclusive. When caring for patients who were assertive and agitated, nurses often had little control. Quint (1962) reported that nurses use verbal and nonverbal communication to block any conversation that was threatening to their identity.

Other communication strategies used frequently by the nurses in this study indicated the nurses' focused on the physiological aspects of care. The analysis of the list of communication strategies for patients with confusion revealed that the nurses were concerned about: the patient's pain, orientating the patient to time and place, and describing reality. When coding responses in the comfort function, it was apparent that physical comfort was more of a concern than emotional comfort. The responses in the nurse interviews verified these observations. During the

interviews, nurses stated that they were concerned about safety, physical comfort, and physiological well-being. Bond (1983) had reached a similar conclusion.

The absence of certain behaviors on the list of strategies for confused patients indicated that the nurses did not focus on the individuality of patients who were confused. Nurses scored very low in items such as life review, references to the patient's past, and discussion of the patients' internal reference points. This lack of individuality was evident in the hierarchical coding system, as well. The majority of the scores on the hierarchical coding system were clustered in the second category which indicated an implicit understanding of the patient. That is, nurses did not adapt their communication to the individual needs of the patient. These findings were similar to those reported by Bartz (1986). She had based her conclusion on the observation that nurses' language and content were structured on what the nurse thought the patient should know. Beaton (1986) also concluded that the nurses' interaction with laboring mothers was focused on the nurses' perception of the labor experience.

The lack of individuality for the patients in this study was reflected in the nurses' interview responses. Nurses described a general impression or an implicit understanding of what it would be like to be confused. Nurses described feelings that could be readily attributed

to anyone in the same situation, such as: loss of control and embarrassment. They did not indicate that their perceptions were based on what the patient had described. These generalities were transferred to the nurses' perceptions on how the family must be feeling as well. Therefore, to answer the research question concerning the nurses' perceptions of the confused patient, it would have to be concluded that it was one of implicit understanding.

7.1.2 Patient Communication

The research was designed to explore the communication of the patient to ascertain if patients, in their confused state, tried to convey meaningful messages. The findings indicated that patient's did relate meaningful messages to their nurse. This confirmed Wolanin's (1984) supposition that, "Words interpreted as delirious ravings often hold the key to the cause when emotional problems are the cause" (p. 122). Several of the patients were trying to express their anxieties about relatives or other matters. In many respects, the conversation of the confused patient was not unlike that of the lucid patient only very repetitious, rambling, and difficult to understand. Confused patients were concerned about physical needs and relationships. Patients were also aware they were confused and disorientated. The disorientation may have been a natural result of constant moves and changing personnel.

The patients' direct references to the nurse were generally non-complimentary. Patients may have perceived that it was the nurse who was restraining them and preventing them from leaving the hospital. It was not unexpected that the patients would vent their feelings and frustrations on the individual nearest at hand, which was usually the nurse. It may also have been that patients were intuitively aware of the nurses' reluctance to care for patients who were confused. Strumpf and Evans (1988) reported that elderly hospitalized patients experienced feelings of anger, resistance, humiliation, and resignation when restrained. Castleberry and Seither (1982) postulated that the increasing physical and verbal abuse of disoriented patients was an attempt to cope with feelings of fear and helplessness. English and Morse (1988) had suggested that the behavior of "difficult patients", which included patients who were confused, may have been an adaptive behavior and an attempt to make the environment adjust to the patients' needs. Therefore, the anger may have been a reflection of the patient's fear or adaptation needs.

7.1.3 Factors Which Impact On Communication

Nurses related several important factors which impacted on their care of and communication with patients who were acutely confused. According to the nurses interviewed, the degree and type of confusion was a key factor in the

quality of the nurses' communication. Nurses said they would not spend time communicating with patients whom they felt were "combative" or with whom communication had no effect such as the chronically confused patient. This finding was similar to a finding reported by Armstrong-Esther and Browne (1986). These researchers noted fewer interactions between nurses and chronically confused patients than with slightly confused or lucid patients. Whether this finding reflects a relationship between attitudes or a negative stereotyping and communication was unknown because of the paucity of studies in this area. DeVellis, Adams, and DeVellis (1984) reported a relationship lower person-centered interaction behavior and negative stereotyping by nurses. Because of the many limitations in her study, Hatton (1977) could not discern a relationship between attitudes and communication.

The negative thoughts about the care of "combative" or chronically confused patients and the nurses' reluctance to communicate may also be related to the patients' altered feedback patterns. Nurses said they avoided interaction with chronically confused and "combative" patients because they were difficult to orientate. Ashworth (1984) reported on an earlier study of hers which found that the nurse's communication was positively correlated with the patient's ability to communicate and give feedback. Research findings presented by Baer and Lowery (1987) suggested that

a crucial factor in whether or not a nurse liked a patient was the patient's response to the helping behaviors of the nurse. Patients in the least liked category tended to reject the nurse and/or the help that was offered. May and Kelly (1982) postulated that the type of care patients received from nurses was dependent upon the patients' ability to acknowledge the communication and attention of the nurse. "Problem" patients did not legitimize the therapeutic aspirations of the nurse and, therefore, called attention to the fragility of nursing authority. The findings in the present study did not confirm or deny this theory.

According to the results of a recent study conducted by English and Morse (1988), elderly confused patients were labelled "difficult patients" by nurses. Unintentional, violent physical or verbal behavior was perceived by nurses as difficult behavior. English and Morse reported that difficult behavior resulted in loss of patient control by nurses and interventions were directed at regaining control.

Another key factor in the care and communication of the nurses was the physical and mental demands of care. Nurses related that they became exhausted, frustrated, and fed up when caring for patients who were confused. Applegate and Delia (1980) suggested that high levels of anxiety, emotional and physical fatigue, or low levels of

involvement could reduce the levels of adaptive, person-centered communication. This relationship may have had a bearing on the results of this study.

Conditions in the workplace were perceived by the nurse as critical factors in their ability to interact effectively with patients. Nurses reported that the heavy work load prevented them from spending time talking to patients. Two earlier studies noted that nurses attributed poor communication with patients to lack of time and the business of the ward (Davitz & Davitz, 1975; and Hockey, 1976). Quint (1965) proposed that an atmosphere of busy activity provided a context which allowed the nurse to control the amount of time allotted to a patient and to justify the time or lack of it.

The type of care delivery may have had a significant effect on nurse-patient interaction. Of the four nurses who demonstrated more person-centered communication, two worked in the ICU. The ICU nurses were able to remain with their patients at all times which increased opportunities for nurse-patient interaction. The ward nurses practiced a form of team nursing. This type of care delivery may have not promoted effective person-centered interaction because the nurses were not able to be with an individual patient for long periods of time. Quint (1965) argued that "a team organization which lacks clear-cut delegation of responsibility provides a convenient tool for staff members

who wish to pass the buck" (p. 127). The findings in this study may have been a more accurate reflection of the realities of the clinical situation.

The close working relationship necessary in team nursing fostered the criticism which many of the nurses in this study expressed towards their colleagues. Nievaard (1987) found that nurses who experienced troubled relationships with fellow members of the hospital staff, particularly physicians and management, tended to have fewer contacts with patients. Bond (1983) and Melia (1982) also found that the quality of the nurses' communication was influenced by physicians and colleagues.

The final research question posited the relationship between the nurses' interpersonal behavior and their perceptions of caring for and communicating with patients who are acutely confused. The major relationship between behavior and perceptions had been discussed. That is, nurses displayed an implicit understanding of the patients. There was a slight relationship between the degree of confusion and position- or person centered speech. Few other relationships could be found. In the interview, the three nurses with the greatest person-centered communication were the ones who carefully considered the use of restraints and were less concerned about the physical and mental demands of the caring for someone who was confused. There may be a relationship between the use of restraints,

fatigue, and person-centered communication. Restraint application was an accepted practice for most of the ward nurses who had the most position-centered speech particularly in the influence function.

7.2 LIMITATIONS OF THE STUDY

Many of the threats to validity and reliability of the study and research tools had been discussed in Chapter IV. Since the purpose of the research was to describe and explore the communication of nurses and patients and the nurses' perceptions, the small sample size was appropriate for this study. Woods and Catanzaro (1988) noted that "factor-searching or factor-relating questions usually lend themselves well to small nonexperimental design (p. 190). As noted earlier, the participants in the study, especially the patients, were representative of the population under study. However, the small sample size prevented any generalization of the findings. As with most qualitative studies, the results must be reviewed in the context of the setting. Even within the same institution, the relationships could not be established because of the small sample size and the uneven distribution between ward and ICU nurses.

The credibility of the findings may have been increased by the familiarity of the researcher with the setting. Because the nurse participants knew the researcher, the

reactivity of the nurse subjects was reduced. Certainly during the interviews, the nurses were very open about their feelings about caring for confused patients. Some of nurses' statements were very negative. Other researchers have found that nurses were reluctant to discuss negative feelings about patients (May & Kelly, 1982). Conversely, because many of the nurses were long-standing colleagues they may have been responding to what they thought the investigator wanted to hear.

Credibility was also increased by using a triangulated methodology. However, there were still several limitations to the methodology used in this study. The brevity of many of the nurse-patient interactions did not allow the nurse enough time to feel comfortable having her conversation observed and audiotaped. The communication behaviors described in this study may not have reflected the nurses' behavior over a longer period of time. Also, the nurses were not asked to validate the results of the analysis. The strength of the study could have been increased by ascertaining the fittingness of the taxonomies. This could have been accomplished by comparing the agreement between the research-generated taxonomies and the experience and perceptions of the informants. Since this was not done, the validity of the taxonomies was threatened.

The complexity and newness of the conceptual framework presented a limitation. Because Kasch's (1986) presentation of the conceptual framework was very theoretical, operationalizing the concepts was problematic. This became readily apparent when coding the functions and responses. The hierarchical coding system required a more discrete delineation of the categories to adequately increase the reliability of the findings. Comparison of the descriptors of the hierarchical coding system used in other nursing research studies would have been useful, had such studies been available.

The reliability of the coding of the responses in the hierarchical coding system was a limitation to this study. Not only was the interrater agreement not strong, but also the reliability was not maintained throughout the study. Consistently sampling the interrater reliability at various intervals during the study would strengthen the reliability of the coding system and the categories in the behavioral functions.

Flaskerud (1986) argued that there were several limitations to Kasch's theory. Not only was the theory limited in scope with it's focus on the nursing interaction, but it also did not provide a measurement of patient outcomes. She was concerned about the effect of nursing interaction on positive changes in the patient's health status. Flaskerud also argued that inadequate criteria were

provided to assess the ability of the nurse to adapt strategies for individual patients. Kasch (1987) replied that "the locus of competence resides in the judgments made by the nurse and the patient" (p. 220). For this present study, it was impossible to measure the effects of communication on patient outcomes or satisfaction. Results indicated that the communication of the nurses did not reach high levels of person-centeredness but whether or not this was important to the patient was unknown. The specific group of patients studied in this research may not have adequately tested Kasch's theory as well as a population composed of lucid patients. Further testing of the theory using different patient samples would be recommended.

7.3 IMPLICATIONS OF THE STUDY

7.3.1 Implications For Nursing Education

The findings in this study were consistent with those of previous research. That is, the nurses' verbal communication behavior was not as effective as it should be. Therefore, does the problem rest with nursing education? Nievaard (1987) observed that communication training and group work had not produced more patient-oriented communication. Haggerty (1987) suggested that baccalaureate programs may have stressed the knowledge of communication techniques more so than the understanding of the process and goals of interaction. This may have been true for all

nursing programs. Educators should examine the content of communication courses and the evaluation of the students' learning.

Ashworth (1984) had stated that competence in nurse-patient communication would be possible when students were taught skills systematically and in combination with theory based practice. The conceptual framework proposed by Kasch could provide a useful structure for teaching and evaluating the communication of student nurses. The theory of nursing action provided a concise delineation of the interactional goals and a theoretical basis for the cognitive aspects of communication.

The low scores on the strategies for confused patients list and some of the incorrect interventions suggested by the nurses when interviewed, indicated a need for continuing education programs which focus on the care of confused patients. Nurses, themselves, reported that they had not attended many continuing education programs related to communication or the care of the confused elderly. Some of the nurses said that their basic education had not provided detailed information about the care of confused patients. The investigator could not locate any studies which focused on the depth of nurses' knowledge related to the care of the elderly confused patient. Two studies reported on the ability of nurses to assess cognitive

deficits in elderly patients (Lincoln, 1984; Palmateer & McCartney, 1985). This area should be examined if these patients are to receive quality care.

7.3.2 Implications For Nursing Practice

Applegate and Delia (1980) suggested that the participants' perception of the constraints imposed by the external setting may affect communication performance. In the present study, it was evident that many of the nurses who demonstrated position-centered behavior were those who were very concerned about; the work load, the lack of time to communicate, and the numerous confused patients on the ward. Although the small sample size eliminated a general conclusion, it would be advantageous to study communication behaviors in different clinical settings and with different types of care delivery systems. Additional staff, particularly on wards where nurses were unable to view the confused patients constantly, may provide improved care to all patients. Because there will be increasing numbers of elderly patients in hospitals, hospital architects should incorporate the needs of the elderly in their planning. Wards designed to facilitate observation of patients by the nurses would be advantageous.

A review of ward policies should be effected to improve the care given to elderly patients. The practice of frequent room changes was very disorientating to several of

the patients in this study. On the ward, patients were moved according to levels of care and the staffing available. That is, if a patient no longer required the care of an RN in a high-level care unit, then that patient would be moved to a low-level care unit staffed by LPNs. It was not unusual for patients to be moved several times during a hospital stay. This practice also disrupted the continuity of care which patients received. Nurses reported that they had been caring for patients an average of two shifts which may have affected their communication. Aguilera (1967) noted that rapport between patients and nurses did not begin until the eighth day of the touching behaviors. Quint (1965) criticized the use of rotating assignments because she felt this practice was detrimental to effective communication.

When communicating with a patient who was chronically or extremely confused, nurses reported they would not continue if they felt they were wasting their time. This finding had important implications for practice. As the population ages, there will be increasing numbers of chronically confused individuals entering acute care facilities. This trend was already evident. Limited studies had demonstrated the importance of the nurses' verbal and nonverbal communication when caring for chronically confused patients. Yet, if nurses were unwilling to communicate with these patients because they

could not see immediate results, quality of care was severely compromised. Regardless of mental status, all individuals must be cared for with dignity and understanding. Further study is necessary to ascertain the differences in the care lucid, acutely confused, and chronically confused patients receive and what can be done to improve communication to these groups.

7.3.3 Implications For Nursing Research

Hirshfield (1986) stated that one of the priorities in geriatric nursing research was, "the identification and conceptualization of actions which are central to what nurses do to create conditions conducive to quality of life" (p. 17). This statement certainly applied to nurses working in the acute care setting. The study of the skills and competencies of nurse when interacting with patients was a significant area of study.

It was evident from the difficulty in coding position-centered and person-centered that more studies were needed to refine the categories in the hierarchical coding system. However, the hierarchical coding system was a useful measurement instrument for coding interaction behavior. With an increased reliability in the coding system, several comparison studies could be attempted.

Hypotheses testing studies could examine the relationship between communication competency and such variable as; age, sex, experience, and education.

Williams (1986) noted that current mental status tests did not identify subtle cognitive changes. Until a valid and reliable measurement of cognitive status is available it would not be possible to measure the effect of position- or person-centered speech on the outcome of acute confusion. However, research such as this has important possibilities for the future.

As a consequence of having to ask the family member for consent, the investigator observed that the families of patients who experienced acute confusion were very upset about the unexpected confusion. They required a great deal of support and information. The needs of the family should be examined in future research.

7.4 CONCLUSION

The initial study question asked by the investigator was, "What interpersonal strategies do nurses use when communicating with elderly postoperative patients who are experiencing acute confusion?". The findings indicated that nurses relied on nonverbal strategies to communicate comfort and caring. Nurses controlled communication by initiating the interactions and by topic changes. Nurses asked a disproportionate number of questions and tended to be more

position-centered in their speech patterns. This was especially true of the ward nurses and all nurses when trying to control the behavior of the patient. The second research question was answered by the findings of the study. There were meaningful messages communicated by patients while confused. The patients' relationship with the nurses was characterized by anger, mistrust, resistance, and resignation. The nurses' perception of the patients was one of implicit understanding. This finding was also verified by the results of the hierarchical coding of the nurses' responses. The factors which influenced the communication of the nurses were: the degree and type of the patient's confusion, the setting, the influence of colleagues, and the physical and mental demands of care. Both in their perceptions of the patient and in their speech, nurses displayed implicit understanding of the patients. Other relationships between the nurses' interpersonal behavior and their perceptions of the confused patient could not be found.

Mayeroff (1971) stated that, "To care for another person, I must be able to understand him and his world as if I were inside it. I must be able to see, as it were, with his eyes what his world is like to him and how he sees himself" (p. 30). Kasch's (1986) framework focused on the individual as a unique human being which was the essence of caring. The theory provided a practical structure for the

data collection and analysis of this research. Conceptually meaningful indices of communicative performance were presented by Kasch which could be used for future research across all patient populations.

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Appendix A

LETTER OF APPROVAL FROM THE ETHICAL REVIEW COMMITTEE

The University of Manitoba

SCHOOL OF NURSING

ETHICAL REVIEW COMMITTEE

Proposal Number N#87/43

Proposal Title: The Interaction between Nurses and Elderly Postoperative Patients experiencing acute confusion.

Name and Title of Researcher(s): Judith W. Brown
Graduate Student
Master of Nursing Program

Date of Review: December 7, 1987

Decision of Committee: Approved: ✓ Not Approved: _____

Approved upon receipt of the following changes:
All changes ok.

Date: Dec 22/87

M. Janisse Interim Chairperson

Head and Professor Position
Psychology Department

NOTE:
Any significant changes in the proposal should be reported to the Chairperson for the Ethical Review Committee's consideration, in advance of implementation of such changes.

Revised 16/May/86/se

Appendix B

LETTER OF CONFIRMATION TO CONDUCT RESEARCH FROM HOSPITAL

WILLIAM BOOTH . . . . . FOUNDER
JARL WAHLSTRÖM . . . . . GENERAL
ARTHUR R. PITCHER . . TERRITORIAL COMMANDER

THE SALVATION ARMY
GRACE GENERAL HOSPITAL

300 BOOTH DRIVE — WINNIPEG, MANITOBA R3J 3M7 — TELEPHONE (204) 837-8311

January 12, 1988

Mrs. Judy Brown
7 Frost Avenue
Winnipeg, Manitoba
R3K OE1

Dear Mrs. Brown:

Regarding your proposed study on the interaction between nurses and elderly post-operative patients experiencing acute confusion, I am pleased to inform you that it has passed all the necessary Committees at the Hospital and that we have approved your going ahead with conducting this study.

As soon as you are ready to commence your project, please be in touch with Dorothy Kawa, or in her absence with myself, to discuss with us how you plan on proceeding and what your timing will be.

We look forward to working with you and wish you all the success in achieving a very successful study.

Yours truly,

Elizabeth Yallowega (Miss)
Asst. Executive Director, Nursing

EY/bp

cc Mrs. D. Kawa

Appendix C

CONSENT FORM FOR PATIENT'S FAMILY

My name is Judy Brown. I am a student in the Master of Nursing program at the University of Manitoba. My interest is the problems older patients experience following an operation. The purpose of this study is to examine the care given by the nurse when a patient is experiencing an episode of disorientation and/or restlessness. Your relative's participation in this study may help to improve the care received by other patients who are experiencing a similar problem following surgery. The study is supervised by Dr T. George at the School of Nursing, University of Manitoba.

At the present time your relative_____ is experiencing disorientation and/or restlessness. I would like an opportunity to tape record the conversation between him/her and the nurses caring for him/her. There will be no inconvenience to your relative and the nurse's attention will not be diverted from the care of the patient. I would also like to look at your relative's chart to gather some general information about the surgery.

All information will be strictly confidential. Your relative will always remain anonymous with no name used when the study is reported. He/she will be identified by a code number which is known only to the investigator. The tape recordings will be erased once transcripts are made. These transcripts will be locked in a filing cabinet.

I would like you to give careful consideration about how your relative might feel about being a participant in this study. You may withdraw your consent at any time. This will not affect the care your relative receives. If you have any further questions about the nature of this study please do not hestitate to call me at home. The number is 885 6186. You may keep a copy of this consent.

Your signature indicates that you have read the consent and are willing to allow your relative to be a participant in the study.

Date _____

Patient's Name _____

Signature of Relative _____

Relationship _____

Witness _____

If you would like a copy of the results of this study please indicate below and include your address.

Yes( ) No( )

Address _____

_____

Appendix D

CONSENT FORM FOR NURSES

You are invited to participate in an investigation of the interaction patterns between nurses and elderly postoperative patients who are experiencing acute confusion. The investigator is also interested in your perception of caring for confused patients.

Participation in this study will include a tape recording of a typical interaction between you and a patient who is experiencing acute confusion. This will be carried out unobtrusively while you are implementing your routine care for that patient. The investigator also requests approximately twenty minutes of your time to ask you some questions about caring for and talking to a confused patient. The interview would take place during the shift at your convenience and in a private location within the hospital. This interview will also be tape recorded. You will also be asked to complete a short checklist of the patient's behaviors.

All information obtained on the tape recording will be strictly confidential. The recordings will be erased once transcripts have been made. Transcripts will be locked in the investigator's filing cabinet. You will remain anonymous, identified only by a code number. Your place of employment will never be identified.

Participation in this study is strictly voluntary. You may withdraw at any time without concern for your employment status.

This study is being conducted by Judy Brown a candidate in the Master of Nursing program at the University of Manitoba and is being supervised by a committee from the School of Nursing. The investigator can be reached at 885 6186 if you have any further questions or concerns.

Your signature will indicate that you have read and understand the consent and are willing to participate. You may keep a copy of this consent.

Date _____

Signature _____

Witness _____

Appendix E

LETTER REQUESTING ACCESS TO THE HOSPITAL TO CONDUCT RESEARCH

7 Frost Avenue
Winnipeg, Manitoba
R3K OE1

Miss Elizabeth Yallowega
Assistant Executive Director, Nursing
Grace General Hospital
300 Booth Drive
Winnipeg, Manitoba
R3J 3M7

Dear Miss Yallowega:

I am a candidate in the Master of Nursing Program at the University of Manitoba and am writing to request access for research purposes to a specific group of patients and nurses in your facility. The purpose of my study is to examine the interaction between nurses and elderly postoperative patients who are experiencing acute confusion. By conducting this research I hope to gain a better understanding and to increase awareness of this common postoperative problem.

I would like permission to tape record a five to ten minute interaction between a patient experiencing acute confusion and his/her nurse. There will be minimal inconvenience to the patients and the consent of the family will be sought. Access to the patient's chart will also be required for demographic information, when the family consents. Approximately twenty minutes of the nurse's time is required for an interview to establish ideas on caring for a patient who is confused. The consent of the nurse will be obtained. A room to conduct the interview will be needed. Data collection may take up to three months and should commence in January, 1988. A copy of the results of this study will be submitted to each of the participating wards. My proposal has been included for your perusal.

This study is being supervised by a thesis committee consisting of Dr. Theresa George, Associate Professor, School of Nursing, University of Manitoba; Dr. Erna Schilder, Associate Professor, School of Nursing, University of Manitoba; and Dr. Doreen Yamashita, Assistant Professor, Faculty of Education, University of Manitoba.

Ethical approval for this investigation will be sought from the Ethical Review Committee, School of Nursing, University of Manitoba. You will receive a copy of the approval when the study is passed.

If you have further questions once you have read the proposal please call me at 885 6186. I will be able to meet with you at any time to discuss this research. I look forward to hearing from you.

Sincerely,

(Mrs.)Judy Brown R.N. B.N.

Appendix F

HEAD NURSE INFORMATION FORM

You and your staff are invited to participate in a study designed to investigate the communication between nurses and elderly patients who are experiencing acute confusion postoperatively. The investigator would also like to explore the perceptions and thoughts of nurses who care for patients experiencing acute confusion.

My name is Judy Brown and I am a candidate in the Master of Nursing program at the University of Manitoba. I would like to call you at a convenient time during the week to determine if there are any patients on the ward who meet the criteria listed below. I would also like the staff to call me at 885 6186 if a patient experiences acute confusion during your absence.

There will be little inconvenience to the patient. I would like tape record a five to ten minute interaction between the patient and the nurse. The nurse, either R.N. or B.N., will have her interaction recorded and be willing to participate in a twenty minute interview with the investigator at sometime during the same shift.

All participants will remain anonymous as will the employing institution. The tape recordings will be strictly confidential. At your request, the investigator will submit a copy of the results of the study to the ward.

Thank you for your participation.

<u>Patient Criteria for Inclusion in the Study</u>

1) Is 65 years of age or over.
2) Is in hospital as an in-patient.
3) Has had a surgical operation within the last month.
4) Has been identified as having acute confusional behavior by the nurse.
5) Has no history of confusion on admission according to family sources or the patient's chart.
6) Has no recent history of alcoholism.
7) Is able to speak and understand English.
8) Is able to hear with or without an aid.
9) Has family members in the city.
10) Exhibits any one of the following behaviors
    a) Disorientation to time, place, or person
    b) Inappropriate behavior such as picking, pulling, or climbing out of bed
    c) Inappropriate communication for this patient or the situation
    d) Illusions or hallucinations

Appendix G

NONVERBAL BEHAVIOR CHECKLIST

Nurse Code_____
Patient Code_____

Facial Expression

Smiles_____
Grimaces_____
Tense_____
Relaxed_____

Eye Contact

Always_____
Occasionally_____
Seldom_____

Body Posture

Sitting_____
Straight_____
Slouched_____
Relaxed_____
Tense_____

Expressive Touch

Light_____
Medium_____
Type_____
Body Parts_____
_____
_____
_____

Distance

_____

Gestures

Nodding_____
Hand Gestures_____

Voice Tone

Calm/Reassuring_____
In control_____
Agitated_____
Threatening_____

Appendix H

VISUAL ANALOGUE SCALE OF CONFUSION

Nurse Code_____

Patient Code_____

Please place and X on the line below indicating your overall assessment of the patient's level of confusion. Thank you.

|_____|

No Confusion Severe Confusion

Note: From "Development of an Instrument to Measure Confusion in Hospitalized Adults" by P.E. Vermeersch, 1986, Unpublished doctoral dissertation, Case Western Reserve University, Cleveland. Reprinted by permission.

Appendix I

INTERVIEW SCHEDULE FOR NURSES

The questions below will be used in the interview of the nurse after the nurse has made a general assessment of the patient's confusion on the VAS-C.

What behaviors would indicate to you that a patient is confused?

What comes to your mind when you hear in report that the patient you've been assigned is described as confused?

What do you think it's like to be old and suddenly confused? How do you think the patient feels?

What factors determine how you communicate with a confused patient? Can you elaborate on any of these?

What communication approaches do you find helpful when you are nursing a patient who is confused?

What are your goals for this patient?

What actions do you think the nurse should take when the patient is confused?

What experiences have you had in the past nursing confused patients? How have these experiences affected the way you now care for these patients?

Does this particular ward influence the way you communicate with confused patients? Please elaborate (if necessary).

Do the people you work with have any influence on the way you communicate with confused patients? Please elaborate (if necessary).

Appendix J

CLINICAL ASSESSMENT OF CONFUSION - II

Nurse Code_____

Patient Code_____

Please complete this assessment of your patient's confusion by checking whether or not the behaviors listed below were present while you were caring for the patient today. Carefully consider each item.

Thank you for your participation.

	Present
Extreme forgetfulness	_____
Forgetful	_____
Decreased ability to concentrate	_____
Altered conceptualization	_____
Noisy	_____
Not recognizing limitations of illness	_____
Restlessness	_____
Difficulty relating to others	_____
Antagonistic	_____
Withdrawn	_____
Irritability	_____
Demanding	_____
Apathy	_____
Speech slurred	_____
Altered voluntary motor response	_____
Absence of any meaningful response	_____
Altered involuntary motor response	_____
Little body movement	_____
No idea of place	_____
Calling people from past	_____
Calls someone known to him/her by another name	_____
Delusional	_____
Paranoid ideation	_____
Talking to people not actually present	_____
Behavior regressed, repulsive, and/or repetitive	_____

Note: From "Development of an Instrument to Measure Confusion in Hospitalized Adults" by P.E. Vermeersch, 1986, Unpublished doctoral dissertation, Case Western Reserve University, Cleveland. Reprinted by permission.

Appendix K

PERMISSION TO USE CONFUSION ASSESSMENT INSTRUMENTS

Development of an Instrument to Measure
Confusion in Hospitalized Adults

This research was partially funded by the Alpha Mu Chapter, Sigma
heta Tau and the Alumni Association, Frances Payne Bolton School of
ursing, Case Western Reserve University.)

Patricia E. Vermeersch, Ph.D.
Assistant Professor
Rutgers, The State University
College of Nursing
180 University Avenue
Newark, NJ 07102
(609) 921-2684
(201) 648-5294

10/26/87

Ms. Brown -

Sorry for the delay.
You have my permission to
use the Clinical Assessment
of Confusion (either version)
for research or practice purposes.
I highly recommend concurrent
use of another instrument to
assess the strength of your
increase. Please send me a copy
of your proposal abstract
name, address + phone # so
that I can follow your
work. Thanks -

Appendix L

CATEGORIES FOR HIERARCHICAL CODING SYSTEM

Category 1

IGNORES PATIENT PERSPECTIVE

Evaluates patient behavior in terms of deviation from the rules and norms.

Relies on the power inherent in the role of the nurse.

No attempt is made to discuss patient's feelings or beliefs

No attempt is made to supply extensive rationales for altering behavior.

Category 1 Level A

COERCIVE DISPLAY OF ROLE POWER

Criticizes or disregards patient's feelings or motivations.

Coerces patients to modify behavior.

Category 1 Level B

POWER RELATIONSHIP BETWEEN NURSE AND PATIENT

Relies on patient's recognition of the power inherent in the status of the nurse.

Does not induce fear of physical or verbal reprisal.

Uses commands directives, imperatives.

Does not verbalize any rule or reason for modifying behavior.

States what patient ought to do, has to do.

Category 1 Level C

STATES GENERAL RULES WHICH APPLY TO THE SITUATION

Behavior is grounded in social convention governing action.

Statements of rules, general goals of treatment.

Nurse's role is to enforce the rules.

Patient's role is to follow the rules.

Nurse is necessary for the welfare of the patient.

States what she will do for the patient.

Imposes nurse's expectations.

Category 2

IMPLICITLY DISPLAYS UNDERSTANDING OF PATIENT

Nurse recognizes the patient's reasoning ability and autonomy.

Does not elaborate on the psychological features of the situation.

Persuasive rather than control strategies used.

Presents forms of reasoning relevant to a generalized class of patients.

Category 2 Level A - Rote Reasoning

STATES SIMPLE REASONS

Recognizes the patient's power of reasoning.

Does not indicate that adoption to the individual beliefs or feelings of the patient is a relevant goal i.e. gives same reasons to everybody.

The needs of the nurse are central, i.e. seeks patient approval for nursing actions.

Gives simple explanations.

Allows patient to make yes/no choices.

May ask an open-ended question but the wording is somewhat abrasive.

Category 2 Level B

STATES ELABORATED REASONS

Gives a more elaborated explanation of consequences.

Patient is asked to think and reason through a situation.

Psychological characteristics of the patient are still implicit.

Allows patient to express concerns in a limited way, "How ya doing?".

Verifies the patient's feeling.

Offers simple encouragement but no motivation.

Category 2 Level C

INTEGRATION OF RULES AND REASONS WITH FACTORS UNIQUE TO THE PATIENT'S SITUATION

There is a general consideration for the patient.

Active interpretive powers of the patient are explicitly recognized.

Strategies are constructed which offer reasons adapted to the patient's situation.

Individualized rationale for norms and rules of

behavior.

Decisions give patient a chance for limited control.

Category 3

TREATS PATIENTS AS UNIQUE INDIVIDUALS

Understands patient's viewpoint of the situation.

Focuses on the motivation and intentions underlying patient action rather than the overt act.

Category 3 Level A

IMPLICIT RECOGNITION OF THE PSYCHOLOGICAL PERSPECTIVE OF THE PATIENT

Is aware that the patient's beliefs and intentions regulate behavior.

The relevance of the psychological qualities of the patient are not elaborated.

Allows patient to express concerns in a more open-ended way, "What's the matter?".

Encourages capabilities.

Allows patient to set goals.

Motivates patient to participate in activity.

Category 3 Level B

EXPLICIT RECOGNITION OF PATIENT'S PSYCHOLOGICAL PERSPECTIVE

Uses the beliefs and feelings of the patient as the basis for action.

Helps patient understand the relationship between psychological states and behavior.

Patient has full control in accordance with beliefs.

Asks patient questions about how she or he is feeling about a situation.

Category 3 Level C

STRATEGIES TO HELP PATIENTS CONSTRUCT THEIR OWN RATIONALE FOR MODIFYING BEHAVIOR

Encourages patient to think about consequences of behavior.

Encourages the patient to engage in self-attribution, to verbalize thoughts, to elaborate intentions and motives, to see the implications of behavior in relation to others, etc.