Importance of nurse caring behaviors as perceived by patients after myocardial infarction: A replication study

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IMPORTANCE OF NURSE CARING BEHAVIORS AS PERCEIVED
BY PATIENTS AFTER MYOCARDIAL INFARCTION
A REPLICATION STUDY

by
LARAE MCCLELLAN WARD

A Thesis submitted in partial fulfillment
of the requirements for the degree of
Masters of Science
in
Nursing

Department of Nursing
University of Nevada, Las Vegas
December, 1995
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ii
ABSTRACT

This study replicates Cronin and Harrison's (1988) study which examined nurse caring behaviors perceived by myocardial infarction (MI) patients (n=40) using the Caring Behaviors Assessment (CBA). Reliability ranged from 0.69 to 0.89. Findings support Cronin and Harrison's study (1988), with items as "knows how to handle equipment", "check my condition closely", and "knows how to give shots, IV's, etc." as most important nurse caring behaviors. "Talk to me about my life outside the hospital" and "visit me if I move to another hospital unit" were identified as least important nurse caring behaviors. Kruskal-Wallis one-way ANOVA and Mann-Whitney U test were used to examine responses to the CBA in relation to demographic variables of age, sex, occupation, educational level, length of Coronary care unit (CCU) stay, previous admission to CCU, previous admission for chest pain, and previous admission to the hospital. No findings at the p = 0.05 were noted. Critical Care Nurses need awareness of patient perceptions of important nurse caring behaviors.
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ACKNOWLEDGMENTS

To my husband, Larry, I would like to express appreciation for all your support though the writing of this thesis. Furthermore, I would like to thank you for your love. To my children, Amy, Natalie, Jennifer, and Jonathan, I want to thank you for putting up with me though six years in this program. For some of you, it is half of your life. I appreciate that each of you can see the value of education.

To Carolyn Whipple, my friend and greatest support. Thank you for being my friend during the entire experience. Thank you for sharing the drive. I also want to thank you for being there in those times that this appeared to be an impossible task. Only you are truly aware of the demands and pressures that accompany this process. Words cannot express my appreciation.

To Dr. Rosemary Witt, I would like to express a sincere thank you for your time, support and encouragement in the completion of this thesis. To my committee, Drs. Susan Michael, Carolyn Sabo and Peggy Perkins, I would like to express my gratitude for your comments and suggestions in the preparation of this manuscript.

To Rebecca Ryder and those at Dixie Regional Medical Center for your support, I want to express my gratitude for all the support and time involved. Finally, to the staff of the Jackson-Hinds Diabetic Foot Clinic, thank you.
CHAPTER I

Introduction

The Study Problem

Caring is viewed as an essential and universal concept underlying nursing practice. The nurse-patient relationship forms the basis for nursing practice. This study examined the caring concept as it relates to the nurse-patient relationship by examining which behaviors made patients feel cared for and cared about. What constitutes nurse caring behaviors must be based on mutual agreement between the nurse and patient. Unless the intended caring behavior of the nurse was identified as "caring", the attainment of the goal to make patients feel cared for and cared about cannot be attained.

Watson (1979) states, "the concept of care is probably one of the least understood ideas used by professional and nonprofessional yet it is probably one of the most important concepts to be understood by human groups...The terms care, caring, and nursing care have both symbolic and functional meanings...Nursing care also has a general, special meaning to nurses, and is often taken for granted in nurses' thoughts and action patterns." (p. xi) Watson defines the core of nursing as those aspects of nursing that are intrinsic to the actual nurse-patient process that produces
therapeutic results. Watson refers to this basic core of nursing as comprising the philosophy and science of caring. (1979, p.xv)

Problem Statement

"Care is the essence of nursing." (Leininger, 1986, p.2). This belief permeates nursing’s value system, and has even served as a boundary between nursing and other professions. For example, nurses have been taught that the profession of medicine focuses on curing and nursing focuses on caring. Caring (Watson, 1988) is further defined as both a science and an art. As the review of literature will indicate; first, patients may associate the instrumental or task-oriented "scientific" behaviors with caring, while nurses may associate the expressive behaviors in the nurse-patient relationship with caring. Second, there are not many studies which actually test and validate Watson’s (1988) Theory of Human Science and Human Care. The problem which this study addressed was what nursing behaviors will be identified by patients who have had a myocardial infarction (MI) as caring.

Purpose of the study

The purposes of this study were two fold. First, the study replicated Cronin and Harrison’s (1988) study which examined caring behaviors as perceived by myocardial infarction (MI) patients. Replication of a study using, the
same instrument and population adds to the empirical knowledge related to the concept of caring. Second, the study was designed to further validate Watson's Theory of Human Science and Human Care. The data collection instrument was developed by Cronin and Harrison based on Watson's theory of caring. There is need for nursing to validate theories which are currently being taught and utilized as a guide to nursing practice (Cronin & Harrison, 1988).

Significance of the Study

Effective caring promotes health and a higher level of wellness (Watson, 1979). When nurses develop a clearer understanding of which nursing behaviors convey caring to patients, they will be able to systematically design caring interventions which enhance patients' coping abilities and help patients deal with the stress more effectively (Cronin & Harrison, 1988).

The population was chosen because heart disease continues to be a problem of such great magnitude in our society. Heart disease was the number one cause of death in the United States in 1990 (Chassie & Bilodeau). Initial treatment of severe myocardial infarction (MI) generally occurs in critical care units (CCU). The first few hours immediately following MI determine treatment and accompanying outcomes. The ability of the health care team to adequately treat the initial acute phase following MI,
requires that the patient receive intensive care. Chassie & Bilodeau (1985, 1990) point out that when individuals are placed in the unfamiliar and bewildering environment of the CCU, feelings of helplessness and fear are compounded. Feelings of anxiety, grief and loss of self-esteem frequently arise contributing to an enormous amount of psychological stress. If the definition of caring behaviors can be clarified for this sample of patients, the study may allow improved nursing interventions to a large population of patients with cardiac disorders.
CHAPTER II

Literature Review and Conceptual Framework

What are expressions of caring? Caring has been described as "the essence of nursing" (Leininger, 1984, p. 3); the "core" of nursing (Watson, 1979); "as a crucial and vital component of nursing" (Gaut, 1984, p.27); "as one essentially and universally applicable concept underlying nursing practice" (Larson, 1981, p.1); and "central to nursing" (Benner, 1984, p. 207). Morse, Bottorff, Neander and Solberg, state, "If caring is really the 'essence of nursing' then it must be demonstrated and not simply proclaimed. If caring is the 'central, dominant, and unifying feature of nursing', then it must be relevant to practice and to the patient and not merely an internalized feeling on the part of the nurse (1991, p. 119). Is there the possibility to measure expressions of caring?

Caring, believed to be the cornerstone of nursing practice, is now being studied internationally from the viewpoint of both the giver of care and the receiver of care. As the review of literature will indicate, the behaviors associated with the concept of caring among these two populations are not always congruent. The literature review presents studies which examine the concept of caring as described by patient groups with varying diagnoses and
nurses providing care. The review is organized around the instruments used to collect the data. First, studies which utilize the CARE-Q: the Care Behaviors Instrument developed by Larson (1981) are reviewed. Second, studies which utilize the Caring Behaviors Assessment (CBA) a refinement of the CARE-Q, developed by Cronin and Harrison (1988) are presented. Third, a small group of phenomenological studies are reviewed. And lastly, a study by Wolf, Riviello, Giardino, Osborn, and Ambrose (1994) using the Caring Behaviors Inventory is reviewed.

Studies using the Caring Behaviors Inventory (CARE-Q)

The Caring Behaviors Instrument (CARE-Q) is an instrument developed by Larson (1981) to rank the importance of pre-identified caring behaviors. The CARE-Q is comprised of 50 behaviors listed on individual cards. Subjects are instructed to sort the cards into seven categories, using a forced-choice method. These 50 behaviors have to be sorted into the following envelopes. The categories and number of allowable choices are as follows: one nurse behavior must be identified as most important; one nurse behavior identified as least important; four nurse behaviors identified as important; an additional four nurse behaviors identified as unimportant; ten nurse behaviors identified in each category of somewhat important somewhat unimportant; and twenty nurse behaviors identified placed into the middle ranking of neither important or unimportant. Face and content validity
of the tool were established by verification of the representativeness of each items by two panels, one comprised of patients and the other panel comprised of nurses (Larson, 1981). Reliability of the CARE-Q was established by test-retest method, using 82 randomly selected registered nurses from the membership of a national organization for cancer nurses. Correlation indicated that there was a consistency ranking of 79% between test 1 and test 2 for the five most important items. The consistency ranking between test 1 and test 2 for the five least important items was 63%. Based on the reliability results, Larson made no additional changes in the CARE-Q, and continued to use the instrument in future studies.

In 1981, Larson used the CARE-Q to assess the difference between the rankings of the importance of nurse caring behaviors among hospitalized cancer patients (n=57) and oncology nurses (n=57). The results of this work was published in several articles (1984, 1987, 1988). Larson chose cancer patients as subjects because she believed they comprise a group of experienced patients, with frequent contact with professional nurses, and thus able to formulate perceptions of nurse behaviors that make up caring. For the patients who completed the rankings, the most important group of caring behaviors focused on clinical competency. The most important caring behaviors included, "knows how to give shots, IV's, etc." and "how to manage the equipment".
The least important caring behaviors were, "asking the patient for the name the patient wants to be called", "the nurse's professional appearance", and "sitting down with the patient". The oncology nurses (Larson, 1986, 1987) identified the behaviors of listening, touching, talking, and individually giving patient care as most important in making cancer patients feel cared for. They perceived professional appearance, cheerfulness, and suggesting questions to ask the patient's doctor as the least important caring behaviors. The oncology nurses perceived comforting and trusting relationships as behaviors making patients feel cared for. In contrast, patients perceived nurse behaviors that demonstrate being accessible, monitoring, and following through as most caring. Larson states, "The identified themes of caring and the important nurse caring behaviors identified in this study provide a beginning foundation for a prescriptive level caring theory" (1987, p. 192). This study by Larson was the first study completed using any kind of tool that would measure caring. Nurses should not assume that intended caring is perceived as such by the patient.

Keane, Chastain, and Rudisill (1987) studied the perceptions of rehabilitation patients (n=26) and nurses (n=26) as to the most and least important nurse caring behaviors. The purposes of this study were to; identify areas of agreement and disagreement between patient and nurse perceptions of important nurse caring behaviors,
examine congruence between these perceptions, and use a systematic approach to obtain baseline data on specific needs of rehabilitation patients. Using Larson’s (1981) CARE-Q instrument, both patients and nurses ranked the most important behaviors as: 'knows when to call the doctor' and 'monitors and follows through'. No reliability testing was identified from the study. This agreement between patient and nurses is contrary to Larson’s (1987) findings. However, it was noted that rehabilitation nurses emphasized caring behaviors related to self-care practices and patient active participation rather than affective behaviors. The ranking directly reflects rehabilitation nursing philosophy as discussed by the authors (Keane, Chastain, and Rudisill 1987).

Mayer (1987) compared perceptions of nurse caring behaviors in oncology nurses (n=28) and cancer patients (n=54), replicating Larson’s work. Two research questions were addressed: 1) Is there a significant relationship between oncology nurses’ and cancer patients’ perceptions of nurse caring behaviors? and 2) Do the findings of this study corroborate Larson’s findings? Larson’s (1981) CARE-Q instrument was used to rank nurse caring behaviors. Mayer again established content and face validity by using an expert nurse panel. Test-retest reliability was established by administering the CARE-Q to a random sample of 115 oncology nurses. Mayer also found differences between
patients and nurses perceptions of most the important nurse caring behaviors. Nurses ranked 'listens to patient' and patients ranked 'knows how to give shots, IV's, etc.' as most important. Mayer's (1987) findings supported Larson's (1984, 1986, 1987) findings.

Komorita, Doehring, and Hirchert (1991) examined the perceptions of nurses with advanced education as to most important and least important caring behaviors. Using Larson's CARE-Q (1981) nursing faculty, nurse managers, and clinical specialists/practitioners (n=110) were asked to indicate what they believed were the most and least important caring behaviors. Reliability was determined through test-retest for nine subjects; the consistency between the first and second scoring was 64.4% for both the five most important and five least important behaviors. Results were compared with Larson's (1984) study and supports these findings (Komorita & al., 1991). "Listens to the patient", was ranked as the most important caring behavior. For the first time, two major categories of caring were identified: affective or expressive nursing skills and instrumental or technical nursing skills.

Mangold (1991) compared senior nursing students' (n=30) and professional nurses' (n=30) perceptions of effective caring behaviors to identify areas of agreement and disagreement. Larson's (1981) CARE-Q was the data collection instrument. No reliability testing was reported.
Both the professional nurses and the student nurses agreed that the most important behavior was "listens to the patient". The results were consistent with those reported by Larson (1987).

Scharf and Caley (1993) selected a slightly different approach and studied patients', nurses', and physicians' perceptions of nurses' caring behaviors. The purpose of this study was to identify how patients (n=50), nurses (n=80), and physicians (n=32) in the same coronary care setting, ranked the importance of different nurse caring behaviors. Because reliability work had not been completed with physicians, this study included a test-retest reliability measure for the physicians only (n=10). The test-retest reliability for physicians was 70% for the five most important and 88% for the five least important items. No reliability testing was reported from this sample of nurses or patients. This group of patients, nurses, and physicians demonstrated more agreement than those in other studies using Larson's CARE-Q. This may be because the nurses and physicians who participated, were directly involved with the patients studied; whereas this direct association was not identified in previous studies. A remarkable finding was the agreement among these cardiology patients and Larson's cancer patients (1987). "Knows how to give shots, IV’s, and how to manage equipment", was the most important caring behavior ranked by Larson’s (1987) patients
with cancer, Mayer’s (1987) patients with cancer and this group of patients with cardiac disorders. The physician’s ranked, "knows when to call the doctor" as number one and "listens to patient" as number two. This group of nurses ranked, "listens to patient" as number one and "knows when to call the doctor" as number two.

In 1993, Gooding, Sloan, and Gagnon replicated Larson’s (1981, 1987) original work in Quebec, Canada. The subjects were again oncology patients (n=42) and nurses (n=46). The authors stated that the oncology setting was chosen because it is an area where both patients and nurses place a strong emphasis on repeated nursing care behaviors. Using the CARE-Q sort instrument, results again supported other studies of this nature, with patients ranking, "knows how to give shots, IV’s, etc." as number one and nurses ranking, "listens to the patient" as number one. No reliability testing was reported.

Von Essen and Sjoden (1991a) used Larson’s (1981) CARE-Q to investigate the importance of nurse caring behaviors as perceived by hospital patients (n=81) and nursing staff (n=105) in Sweden. The only modification of the CARE-Q was that it was translated into Swedish. No reliability or validity testing of the Swedish version was performed. Results were compared to Larson (1984) and Mayer (1987) supporting the findings of the two previous studies. Patient’s perceptions differ from nursing staff perceptions
in that patient's view the instrumental behaviors as most important and the nursing staff view expressive behaviors as most important. Of the nursing staff sample, 59% were identified as nurses aides or nursing assistants.

Because of the forced response into a quasi-normal distribution, von Essen and Sjoden developed a free response format questionnaire with the same 50 behavioral items as the CARE-Q (Larson, 1981). Rather than sorting items with only a predetermined number in each category, the free response format allows the subject to choose any number of most important items. No reliability was reported within this study using the modified version of Larson's CARE-Q.

This second study, (1991b) was a systematic replication and methodological extension of the previous investigation (von Essen & Sjoden, 1991a). The study subjects were patients (n=86) and nursing staff (n=73). Half the patient and half the nursing staff groups were administered the CARE-Q and the other half the revised questionnaire. Patients and staff had different perceptions of what constituted good care. Patients perceived behaviors such as "giving honest and clear information" and "showing competent clinical expertise" as most important where as nursing staff perceive expressive/affective behaviors as most important. The difference between the CARE-Q and the free response format questionnaire was that staff gave higher ratings than
patients to 30 items in the free response format as compared to six in the predetermined format.

Rosenthal (1992), compared coronary care patients' (n=30) and nurses' (n=30) perceptions of nurse caring behaviors. Larson's (1981) CARE-Q instrument was used. No reliability testing of the instrument was reported. The patient population included only subjects with a diagnosis of angina, rule out myocardial infarction (MI) or acute MI. The findings of this study supported those findings of the other studies in that patient's identified instrumental behaviors as most important and nurse's identified expressive behaviors as most important.

In a third study, Von Essen and Sjoden (1993) compared Swedish psychiatric patients' (n=61) and staff (n=63) perceptions of caring behaviors. The CARE-Q was modified for the Swedish language and for the use with psychiatric patients. Again, no reliability was reported. Both groups identified "listens to the patient" as the most important caring behavior. Of the top ten most important caring behaviors, four behaviors were common to both groups.

A fourth study, Von Essen and Sjoden (1995) compared the perceived occurrence and importance of caring behaviors among patients and staff in psychiatric, medical and surgical care. The Swedish version of Larson's (1981) CARE-Q was used to assess importance of perceived caring behaviors. A questionnaire using the 50 nurse caring
behaviors was developed by the authors to assess how often the occurrence of these behaviors (CARE-How often) happened. In psychiatric care, 52 patients completed the CARE-How often, 62 psychiatric patients completed the CARE-Q. Fifty-four psychiatric care staff completed the CARE-How often and 63 psychiatric staff completed the CARE-Q. In medical care, 38 patients completed the CARE-How often and 47 medical patients completed the CARE-Q. Forty-two medical care staff completed the CARE-How often and 43 medical care staff completed the CARE-Q. In surgical care, 33 patients completed the CARE-How often and 40 surgical patients completed the CARE-Q. Twenty-seven surgical care staff completed the CARE-How often and 27 surgical care staff completed the CARE-Q. In psychiatric and medical care, but not in surgical care, staff considered several behaviors to occur more often than patients. Each type of group agreed with respect to the rankings of the behaviors. "Explains and facilitates" occurred rarely and "Monitors and follows through" occurred often, with both patients and staff.

Overall patients and staff differed in perceived importance of behaviors. Psychiatric patients perceived "Explains and facilitates" as most important and medical/surgical patients perceived "Monitors and follows through" as most important. All staff considered "Comforts" as most important.

In each study participants expressed frustration with the Q-sort method. Most participants found the instructions

Studies using the Caring Behaviors Assessment (CBA)

While studies related to caring behaviors using the CARE-Q have occurred, another group of studies using a different instrument were also progressing. In 1988, using Watson’s (1979, 1988) Theory of Human Science and Human Care as a theoretical framework, Cronin and Harrison, developed the Caring Behaviors Assessment (CBA). The CBA identifies 61 nursing behaviors, based on nursing behaviors congruent with Watson’s ten carative factors. The behaviors are ordered into seven subscales: 1) Humanism/Faith-hope/Sensitivity, 2) Helping/trust, 3) Expression of positive/negative feelings, 4) Teaching/learning, 5) Supportive/protective/corrective environment, 6) Human needs assistance, and 7) Existential/phenomenological/spiritual forces (S. Cronin & B. Harrison, personal communication, March 6, 1992). Subjects, rather than having to make a forced choice into categories, use a five-point Likert-type scale, to indicate the degree to which each behavior communicates caring behaviors. The responses range from "1" indicating "little importance", to "5" indicating "much
importance. Validity was established by a panel of four experts familiar with Watson's (1988) model. Reliability was determined using study sample responses to calculate Cronbach's alphas for each of seven subscales, and coefficients ranged from 0.66 to 0.90. The study sample for the initial use of the CBA was 22 myocardial infarction (MI) patients. This study revealed that nursing actions focusing on the physical care and monitoring of patients were seen as most indicative of nurse caring behaviors.

Parsons, Kee, and Gray (1993) replicated the study done by Cronin and Harrison (1988) to determine surgical patients' (n=19) perceptions of perioperative nurse caring behaviors. The purposes of the study were to identify perioperative nurse behaviors perceived as caring by selected outpatient surgical patients, to determine if any of the behaviors were perceived as more important than others, and to contrast the findings from this study with those of a similar study of patients who experienced a myocardial infarction (Cronin & Harrison, 1988). In an interview participants were asked to identify, in their own words, nursing behaviors that they perceived as caring during their perioperative experience. Using a revised version of the CBA, the participants were then asked to rank the identified behaviors on a five-point Likert scale ranging from most important to least important like in the original study. Prior to this study, eight items were
eliminated from the CBA because they were applicable to patients whose hospital stays extended beyond 24 hours. No reliability findings were reported. Of 12 items ranked as most important, six of these items were similarly ranked by the coronary care patients in the study done by Cronin and Harrison (1988). The two highest ranked items in both studies were, "know what they are doing" and "be kind and considerate".

Huggins, Gandy, and Kohut (1993) examined emergency department patients' (n=288) perceptions of nurse caring behaviors. The patients were divided into three categories according to seriousness of illness. The purpose of this study was to replicate and extend the findings of the Cronin and Harrison (1988) study. Cronin and Harrison's CBA tool was used with modifications. The modification of the instrument allowed for administration on the telephone and for administration to emergency department patients. Several statements were modified to be more appropriate for short term emergency department visits rather than long-term inpatient hospitalizations. The modified CBA tool contained 53 nursing behaviors that patients rated on a four-point ordinal scale from unimportant (1) to an absolute must (4). Additional questions, 54 through 65, were added to identify the patients' satisfaction with the services received. All statements were changed from first person to third person and references to health or illness were changed to
illness/injury. The subscale existential/phenomenological/spiritual forces was omitted. Cronbach’s alpha reliability was done with six of the seven subscales and compared to the reliabilities done by Cronin and Harrison (1988). The findings ranged from 0.72 to 0.87. The technical nursing behaviors were the items that all patients saw as most important to experience caring. These findings extended those of the Cronin and Harrison (1988) study. The patients in the nonurgent group had higher expectations than those in the emergent group. The nonurgent population identified more nurse caring behaviors than those in the emergent category, and a higher percentage of this population identified these behaviors as a "must" for them to feel that they had received excellent emergency department care.

In 1991, Stanfield addressed Watson’s (1979, 1988) caring theory and instrument development testing the CBA to determine reliability and validity and to validate the theory which it was based. The CBA was administered to patients (n=104) on medical-surgical units. The alpha coefficients for the complete instrument was 0.9566. The alpha coefficients for the subscales ranged from 0.78 to 0.89. It was shown that the CBA is a reliable instrument which can be used in the medical-surgical setting to assess patients’ perceptions of caring behaviors.

The five items with the highest means include: "give my pain medication when I need it" (M = 4.86); "Know when its
necessary to call the doctor" (M = 4.85); "give my treatments and medications on time" (M = 4.83); "know how to handle equipment" (M = 4.83); and "know what they're doing" (M = 4.83). The five items with the lowest means include: "visit me if I move to another hospital unit" (M = 2.27); "talk to me about my life outside the hospital" (M = 2.65); "ask me what I like to be called" (M = 3.17); "consider my spiritual needs" (M = 3.34); and "help me see that my past experiences are important" (M = 3.54).

Construct validity was evaluated through factor analysis. Fifty-six items loaded on factor four which indicated that more than one construct was being measured, however 23 items loaded on more than one factor. Four factors with three or more loading at the 0.4 level or better were identified. All items loaded on factor four with the exception of six items (2, 21, 25, 26, 27, & 49) and factor four was considered to indicate caring. The factor analysis did not support the existence of ten discreet carative factors or subscales. Caring behaviors that were identified by Cronin and Harrison (1988) and items loading on factor 1 include behaviors related to the nurse-patient relationship, teaching and learning issues, assistance in the maintenance of basic needs and an awareness of needs other than those that are purely physical' (Stanfield, 1991).
Phenomenological approach to identify caring

Taking a slightly different viewpoint, Rieman (1986) used a phenomenological approach to analyze ten hospitalized patients' descriptions of noncaring behaviors and attitudes of nurses. Three themes emerged to characterize the basic structure of a noncaring interaction. First, the nurse was perceived as being physically present but emotionally distant. Second, the nurse's action were interpreted as belittling and inhumane, thus devaluing the patient as a unique individual. This resulted in the third theme, patient feelings of frustration, depression, anger, and anxiety.

Burfitt, Greiner, Miers, Kinney, and Branyon (1993) used a phenomenological approach inquire about 13 critical care patients. The purposes of this study were to describe patients' perceptions of caring as exhibited by professional nurses in a critical care unit and to describe the meaning to the patients of these demonstrations of caring. Three concepts were identified: vigilance, mutuality, and healing. Caring was described as a mutual process in which intentions are joined for a shared experience. In this mutual process, healing was viewed as the outcome that might otherwise be elusive.

McNamara (1995) used qualitative, descriptive methodology to analyze data collected in audio taped interviews with five perioperative nurses. The study
participants identified their perceptions of caring behaviors with conscious and unconscious patients in the perioperative, intraoperative, and postoperative periods. The conceptional framework for which this study was based, on Watson’s Theory of Human Science and Human Care (1988). These nurses, "described the essential structure of caring as the establishment of a human care relationship and provision of a supportive, protective, and/or corrective psychological, physical and spiritual environment" (p. 377). This study did support Watson’s Theory by validating the ten carative factors and present a view of the caring dimension of perioperative nursing.

**Study using the Caring Behaviors Inventory**

Wolf, Riviello, Giardino, Osborn, and Ambrose (1994) measured the responses of patients (n=263) and nurses (n=278) with the Caring Behaviors Inventory to evaluate dimensions of nurse caring. Using an exploratory factor analysis, five dimensions of nurse caring were identified; 1) respectful deference to others, 2) assurance of human presence, 3) positive connectiveness, 4) professional knowledge and skill, and 5) attentiveness to the other’s experience. Test-retest reliability was established (r = .96, p = .000) on a nurse sample. The alpha coefficient was .83. Internal consistency reliability resulted in an alpha coefficient of .96 in the combined nurse and patient sample. Content validity was established by a panel of four nurse
experts. Construct validity of the contrasted groups type was established comparing nursing staff \((n = 278)\) and patient \((n = 263)\) responses on the total scores of both groups. Wolf et al. identified this as a preliminary study. "The dimensions of nurse caring could provide a framework for nurses to understand caring situations and increase their awareness of nurse and patient caring moments" (p.111). Reviewing the five factors suggests a fit to the dimensions of nurse caring within the framework of Watson's Theory of Human Science and Human Care (1988). This study was not looking at individual items identified by the patients in this sample.

(1988) have developed the CBA as a tool to test Watson’s Ten Carative Factors (1979, 1988).

Conceptual Framework

Nursing is concerned with promoting health, preventing illness, caring for the sick, and restoring health (Watson, 1979). Caring is presented as a moral ideal, with a concern for preservation of humanity, dignity, and fullness of self (Watson, 1988). Watson (1988) states, "The introduction of the professional nurse as a person in a transpersonal relationship with the patient may conflict with traditional views of the professional nurse" (p. 64).

The goals for the theory are associated with mental-spiritual growth for self and others, finding meaning in one’s own existence and experiences, discovering inner power and control, and potentiating instances of transcendence and self-healing. (p.74)

Watson (1988), describes the central concept within the theory as transpersonal human caring. "Two persons (nurse and other) together with their unique life histories and phenomenal field in a human care transaction comprise an event. An event, such as an actual occasion of human care, is a focal point in space and time from which experience and perception are taking place, but the actual occasion of caring has a field of its own that is greater than the occasion itself. As such, the process can go beyond itself, yet arise from aspects of itself that become part of the
life history of each person as well as part of some larger, deeper, complex pattern of life.

Once the nurse and the individual achieve a transpersonal relationship, the two persons have achieved an actual caring occasion and have entered into a compatible sense of congruence. "An actual caring occasion involves action and choice by the nurse and the individual. The moment of coming together in a caring occasion presents the two persons with the opportunity to decide how to be in the relationship-what to do with the moment...If the caring occasion is indeed transpersonal and allows for the presence of the geist or spirit of both, then the event expands the limits of openness and has the ability to expand human capacities." (Watson, 1988, p.59) "A transpersonal caring relationship connotes a special kind of human care relationship-a union with another person-high regard for the whole person and their being-in-the-world" (Watson, 1988, p.63).

Nursing is concerned with the promotion of health, prevention of illness, caring for the sick, and restoration of health (Watson, 1979). The carative factors are the elements that the nurse uses for the delivery of health care. Watson (1988), identifies ten "carative" factors that the nurse uses as a framework for the caring process:

1. Formation of a humanistic-altruistic system of values.

This is the first and most basic factor. Humanistic
values includes kindness, empathy, concern, and love for others. Altruistic values arise from commitment to and satisfaction from receiving though giving.

2. The instillation and nurturing of faith and hope. The patient’s beliefs are encouraged and respected as significant influences in promoting and maintaining health.

3. Cultivation of sensitivity to one’s self and others. Sensitivity to self is the recognition and acknowledgment of feelings—painful as well as happy ones. Sensitivity is cultivated by looking into oneself and willingness to explore one’s own feelings.

4. Development of a helping-trusting, human caring relationship. A helping-trusting human caring relationship evolves from a certain quality of communication. A patient who feels that a nurse really cares about trust, can trust the nurse and thus, the patient and nurse are partners in helping to obtain wellness.

5. Promotion and acceptance of the expression of positive and negative feelings. A focus on feelings and the ‘nonrational’ emotional aspects of an event is necessary for nurses engaged in the human caring process.

6. Use of creative problem-solving processes. Professional nursing employs the nursing process, which
is a creative problem-solving method to help with decision making in all nursing situations. A creative problem-solving approach is the nurse's valuable tool for 'pulling it all together'. It is the focus of the nurse's orientation for practicing the art and science of caring.

7. Promotion of transpersonal teaching-learning. This includes scanning, formulating, appraising, planning, implementing, and evaluating—all of which focus on the nurse as a coparticipant and on learning (because without learning, there has been no teaching). The caring process draws on the transaction between the nurse and the one cared for. Both can be active coparticipates in the teaching-learning process.

8. Provision for a supportive, protective, or corrective mental, physical, sociocultural, and spiritual environment. This includes 1) comfort, 2) privacy, 3) safety, and 4) clean aesthetic surroundings. This is the routine day-to-day nursing care. They are routine functions and activities of the nurse that promote or restore health, prevent illness, or care for the sick.

9. Assistance with gratification of human needs. A need is generally defined as a requirement of a person which if supplied, relieves or diminishes distress or improves well-being. The needs operate interdependently. One need can never be separated from
another. The lower order needs include survival and functional needs; the higher order needs are integrative and growth seeking needs. When one need is affected, all the other needs are affected, directly or indirectly.

10. Allowance for existential-phenomenological-spiritual forces. The clinical application of existential concepts is based on the assumption that each person must find his or her own meaning and solution to the problems of existence-separateness, aloneness, and death. A phenomenological orientation to nursing emphasizes understanding people from their frame of reference, from their own phenomenal world. The spiritual dimension refers to the inner self or essence, which allows for the development of a higher degree of consciousness and inner strength and transcendence of the usual self (Watson, 1979 & 1988).

These carative factors combine humanistic values with scientific knowledge base to guide nursing action. Watson's (1979) ten carative factors are the basis of nursing intervention within The Theory of Human Science and Human Care (1988). The ability to measure "caring" has been established by Cronin and Harrison (1988) with their Caring Behaviors Assessment. The instrument identifies those behaviors that causes patients to feel cared for and cared about.
Assumptions

The following assumptions underlie this study: (1) Caring can be described in terms of behavior. (2) Patients can identify and describe nursing behaviors that indicate that the nurse cares for and about them (Cronin & Harrison, 1988). (3) Caring is an important aspect of nursing intervention and the nurse-patient relationship. (4) Participants will answer the questionnaire truthfully.

Research Questions

Nursing education is based on the fundamentals of caring. Nurse educators try to provide their students with courses in the curricula that will enable the students to provide quality humane patient care (Mangold, 1991). These studies suggest that nurses should not assume that their intended care behaviors are perceived by their patients as caring or that skill competency of nurses are significant to the patients’ perception of effective caring. Watson’s (1979) philosophy and science of caring was developed as a curriculum tool to instruct students in what is caring. Therefore, it is imperative that if caring is to be retained as the "essence of nursing" and if research is to advance, then the concept of caring needs to be questioned (Morse, Solberg, Neander, Bottorff & Johnson, 1990).

The research questions studied were:

1) What behaviors exhibited by nurses in the CCU are perceived by patients with MI as indicators of caring?
2) Which nurse caring behaviors are perceived as most important and least important by patients with MI?
3) Do demographic variables of age, sex, occupation, level of education, number of days in CCU, or previous admissions to the hospital or CCU influence these perceptions?
4) Will this study validate the study done by Cronin and Harrison (1988)?
5) Will the patients with MI perceptions of nurse caring behaviors validate Watson’s Theory of Human Science and Human Care (1988)?

Definition of Terms
For the purposes of this study, the terms utilized were defined as follows:

1) Caring - as the process by which the nurse becomes responsive to another person as a unique individual, perceives the other’s feelings, and sets that person apart from the ordinary (Watson, 1988).

2) Nurse caring behaviors - are those things that a nurse says or does that communicate caring to the patient (Cronin & Harrison, 1988).
CHAPTER III

Methodology

Research Design

An exploratory/descriptive method was used for this study. Exploratory studies are useful when little is known about the phenomenon of interest (Woods & Mitchell 1988). Exploratory studies occur when the phenomena has been described and ways to measure the phenomenon are identified. The focus of an exploratory study is identification of factors and characteristics related to the primary phenomenon of interest. In exploratory research, investigators attempt to find relationships within the study variables, rather than attempt to determine causation, (Woods & Mitchell 1988, LoBiondo-Wood & Haber 1994).

In this study the subjects were given the Caring Behaviors Assessment (CBA) and demographic data were collected. The CBA was chosen because of the previous studies using it and the identified subscales which follow Watson's (1979, 1988) ten carative factors within the theory. The demographic data collected included information concerning age, number of days in CCU, sex, previous admissions to CCU, occupation, and level of education. A Kruskal-Wallis one way ANOVA will be used to examine responses to the CBA in relation to demographic variables.
Nurse caring behaviors are the primary phenomenon of interest for this study. Because an understanding about the concept of caring is now developing, a replication study will contribute to the body of nursing knowledge by seeing if earlier results can be repeated, (Polit & Hungler, 1983). Nurse caring behaviors is the concept to be studied within the conceptual framework of Watson's (1988) Theory of Human Science and Human Care. The ten "carative" factors further guides the research design within the conceptual framework with the use of the seven subscales. There is a need in nursing to further develop and validate existing theories, as well as investigate the effects of caring on patient outcomes. This replication study, of Cronin and Harrison's (1988) original study contributes to both needs.

Research Setting and Sample

The study was conducted at a 106 bed community hospital in the rural area the southwest. Data were collected on a 31 bed medical unit in the facility. The nursing care in that unit was delivered via primary care method.

First, the population of interest was the patient with a myocardial infarction (MI). This group of patients was selected as the target population because the individual who has had an MI is particularly vulnerable to the physiologic responses associated with stress state. Increases in heart rate and blood pressure lead to increased demands on an already compromised myocardium. The consequences may
include dysrhythmias, alterations in cardiac output, and further extension of the ischemic area, (Chassie & Bilodeau, 1990) If nursing behaviors that convey caring to this group can be identified, the implementation of such behaviors may help reduce the stress experience (Cronin & Harrison, 1988).

Second, this study was a replication of Cronin and Harrison (1988) in which the population was those patients with myocardial infarction. The research design and statistical technique used were appropriate for this replication study.

A convenience sample of approximately forty MI patients who met the criteria for inclusion was selected. The assumptions of normal distribution and homogeneity of variance were not made, due to the study’s small sample size. Due to these assumptions nonparametric statistical techniques will be used in data analyses. With nonparametric statistics there are no assumptions about the distribution of the variable in the population. The nonparametric techniques have relatively few assumptions that must be met before they can be used (Munro, 1986). Participants were selected on the basis of availability with no attempt at randomization. This same subject selection was used by Cronin and Harrison (1988). This approach has the advantage of feasibility and lower cost, (Woods & Mitchell, 1988).

The following criteria were used for the inclusion in the sample: (1) diagnosis of myocardial infarction, made on
the basis of symptoms and electrocardiographic changes and confirmed by an abnormal elevation of cardiac enzyme levels; (2) CCU stay of at least 24 hours, but not more than seven consecutive days; (3) transfer directly from CCU to the medical unit; (4) ability to read, speak and understand English; and (5) physical and mental ability to participate in the study as assessed by the patient’s primary nurse. The sample represented the population of interest, which were patients with an MI. The perceived nurse caring behaviors studied were those behaviors experienced by the patients while in the CCU.

**Human Subject Rights**

Prior to participation in this study, each participant was informed of the purpose of the study, procedure, and potential complications of participating. No potential consequences were identified. Each subject was given the opportunity to ask questions or clarify any misunderstanding before consenting to participate in the study. The subjects were informed that there were no consequences or repercussions if they chose not to participate, and that they could withdraw from participation in the study at any time. Written consents were obtained from each participant. The confidentiality of each subject was maintained throughout the study. Approval for the study was obtained from the Human Subjects Rights Committee at the University of Nevada, Las Vegas and at the participating agency.
Data Collection Methods

Once potential subjects were identified, the researcher determined if the subject met the inclusion criteria. If so, the patient was contacted by the investigator to explain the study and its purpose. Those patients interested in participating, were asked to sign the informed consent prior to data collection. If the patient agreed, the CBA and the demographic data form were completed. If a patient was unable to complete the instruments independently, the investigator or a family member read the questions aloud and marked the responses.

Confidentiality was maintained. The demographic data and response sheets were separated from the signed consent form. The researcher was the only person with access to the returned questionnaires. The returned questionnaires were kept at the researcher’s home in a locked cabinet with the researcher being the only person having a key.

Instrument Description

The Caring Behaviors Assessment (CBA) was developed by Cronin and Harrison (1988) to assess the contribution of specified nursing behaviors to a patient’s sense of feeling cared for and cared about. The CBA appears to be the second generation of the CARE-Q (Larson, 1988) and was developed to simplify measurements of the concept of caring for the critical care setting.
The CBA lists 63 nursing behaviors, ordered into seven subscales which are congruent with Watson's (1979) 'carative' factors. Watson's first three factors (Humanism/Faith-Hope/Sensitivity) are grouped together into one subscale with 16 items. The sixth carative factor, "use of creative problem-solving caring process" was assumed by the Cronin and Harrison to be inherent to all aspects of nursing practice, making it "imperceptible to patients." Therefore, this factor was omitted as a subscale. The other subscales are as follows: subscale two, helping/trust with 11 items; subscale three, expression of positive/negative feelings with 4 items; subscale four, teaching/learning with 8 items; subscale five, supportive/protective/corrective environment with 12 items; subscale six, human needs assistance with 9 items; and subscale seven, existential/phenomenological forces with 3 items.

The instrument, uses a five-point Likert scale with "5" representing "much importance" and "1" representing "little importance". The subjects are asked to indicate the degree to which the nursing behavior communicates caring to them.

Internal consistency reliability was determined by Cronin and Harrison in the initial study sample (1988). Cronbach's alphas were calculated for each of the seven subscales. Reliability coefficients ranged from 0.66 to 0.90. Reliability coefficients for the seven subscales ranged from 0.78 to 0.89 in the study done by Stanfield.
(1991). In this study, reliability was assessed calculating Cronbach’s alpha of the seven CBA subscales as Cronin and Harrison (1988) did in their investigation. Reliability coefficients ranged from 0.69 to 0.89.

In the original study, face and content validity were established by a panel of four content specialists familiar with Watson’s conceptual model. The congruency of each behavior with its given subscale was rated by the panel and those items with interrater reliabilities of less than 0.75 were recategorized into more appropriate subscales (Cronin & Harrison, 1988).

The demographic questions are the same as the Cronin and Harrison (1988) study and include: age, sex, occupation, highest level of education, number of days in CCU, and previous admissions to CCU. Prior hospitalization and prior admit for chest pain were added to the demographic questions to assess if these variables were significant in relation to individual CBA responses.

**Data Analysis**

Descriptive statistics were used to analyze demographic information. A mean and standard deviation were calculated on each subscale as well as individual items of the CBA. Summaries of behaviors rated as most important and least important are identified. The seven CBA subscales ranked from highest to lowest are also identified. The assumptions of normal distribution and homogeneity of variance were not
made due to the study's small sample size. With nonparametric techniques, there are no assumptions about the distribution of the variable in the population.

The nonparametric techniques have relatively few assumptions that must be met before they can be used (Munro, 1986). Therefore, the nonparametric Mann-Whitney U test and Kruskal-Wallis one-way ANOVA were used to examine the relationships between responses to the CBA and the demographic variables (sex, age, education level, previous CCU admissions, length of CCU stay, prior hospital admissions, and prior admission for chest pain).

ANOVA answers the question, do group means differ from each other? In ANOVA, the independent variable is at the nominal level. A one-way ANOVA means that the researcher is testing only one independent variable (Visintainer & Munro, 1986). The demographic data were divided into variables of age, occupation, level of education, number of days in CCU, and previous admissions to CCU. Data were compared with responses to individual items on the CBA and also each of the subscales to determine if any relationships existed. The Kruskal-Wallis one-way ANOVA was used to analyze the effects of multiple factors. It is performed with ordinal data and is based on the assignment of ranks to the scores for the various groups (Woods, 1988).

The Mann-Whitney U test is a nonparametric alternative for the t-test for the difference between two independent
means. This test is used on the nominal data, sex. The scores for the groups were ranked together, and each was labeled as coming from one of the two groups. The U is calculated by the total number of times that the scores from group 1 preceded the scores from group 2 (Woods, 1988). For example, the male respondents and the female respondents were ranked and summed. The logic of the Mann-Whitney U test centers around the idea that if the sum of the rankings of one group differs greatly from the sum of the rankings of the second group, we should conclude that there is a difference in central locations of the populations. The sum of the rankings are approximately normally distributed. (Groebner & Shannon, 1987, p.549).
CHAPTER IV

Data Analyses and Results

Sample Description

The data obtained from the participants included responses to the research instrument (Caring Behaviors Assessment) and demographic information. The responses to the CBA and the research questions will be discussed later in this chapter. The demographic data from the sample is presented in Table 1 and Table 2.

The total sample size was comprised of 40 participants. The sample included 31 (77.5%) men and nine (22.5%) women. The participants ranged in age from 41 to 80+ years with the modal group between 71 to 80 years. Eighty percent of the participants were 61 years or older and 57.5% of the sample were over 71 years of age. Seventy-two percent of the participants were retired. The education level ranged from the tenth grade to completion of a masters degree. The vast majority (87.5%) had completed a high school diploma or greater. The average length of CCU stay was 3.78 days with 21 (42.5%) participants having been in the CCU previously. Thirteen (32.5%) participants had an earlier hospital admission for chest pain and 34 (85%) participants had been admitted to the hospital before.
Table 1

Frequency Distribution for Demographic Characteristics of the Patient Sample (N=40) Sex, Age, Occupation, and Level of Education.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex: Male</td>
<td>31</td>
<td>77.5</td>
</tr>
<tr>
<td>Female</td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>Age: 41-50</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>51-60</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>61-70</td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>71-80</td>
<td>19</td>
<td>47.5</td>
</tr>
<tr>
<td>80+</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Occupation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retired</td>
<td>29</td>
<td>72.5</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>27.5</td>
</tr>
<tr>
<td>Level of Education:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 years</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>11 years</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>12 years</td>
<td>11</td>
<td>72.5</td>
</tr>
<tr>
<td>13 years</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>14 years</td>
<td>7</td>
<td>17.5</td>
</tr>
<tr>
<td>15 years</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>16 years</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>17+ years</td>
<td>3</td>
<td>7.5</td>
</tr>
</tbody>
</table>
Table 2

Frequency Distribution for Demographic Characteristics of the Patient Sample (N=40) Number of Days in CCU, Previous Admission to CCU, Previous Admission for Chest Pain, and Previous Hospital Admission.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Days in CCU:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>35</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>22.5</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>17.5</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Previous Admission to CCU:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>52.5</td>
</tr>
<tr>
<td>No</td>
<td>19</td>
<td>47.5</td>
</tr>
<tr>
<td>Previous Admission for Chest Pain:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>13</td>
<td>32.5</td>
</tr>
<tr>
<td>No</td>
<td>27</td>
<td>67.5</td>
</tr>
<tr>
<td>Previous Hospital Admission:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>34</td>
<td>85</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>15</td>
</tr>
</tbody>
</table>
Instrumentation

The Cronbach's Alpha reliability assessment for internal consistency was computed for each of the seven subscales of the CBA. The reliability coefficients ranged from 0.69 (Human needs assistance subscale) to 0.89 (Humanism/faith-hope/sensitivity subscale). Table 3 displays the reliability coefficients for each of the seven subscales.

Table 3
Reliability Coefficients for the CBA Subscales.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>M ± SD</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanism/faith-hope/sensitivity</td>
<td>70.18 ± 7.62</td>
<td>0.89</td>
</tr>
<tr>
<td>Helping/trust</td>
<td>43.56 ± 6.35</td>
<td>0.83</td>
</tr>
<tr>
<td>Expression of positive/negative feelings</td>
<td>15.60 ± 3.43</td>
<td>0.80</td>
</tr>
<tr>
<td>Teaching/learning</td>
<td>31.38 ± 6.80</td>
<td>0.89</td>
</tr>
<tr>
<td>Supportive/protective/corrective environment</td>
<td>55.72 ± 7.24</td>
<td>0.86</td>
</tr>
<tr>
<td>Human needs assistance</td>
<td>37.48 ± 2.78</td>
<td>0.69</td>
</tr>
<tr>
<td>Existential/phenomenological</td>
<td>12.28 ± 2.48</td>
<td>0.75</td>
</tr>
</tbody>
</table>
Data Analysis

Since this study was a replication of a previous study (Cronin & Harrison, 1988), the data were analyzed using the same methods because done this way originally. Means and standard deviation (SD) were calculated for each of the 63 items within the Caring Behaviors Assessment (CBA) items. Due to copyright agreement with original author, the data cannot be presented for each item, but is available directly from Cronin and Harrison. Mean scores ranged from 4.85 on the behavior identified as most important ("know how to handle equipment") to a low of 2.95 on the least important item ("visit me if I move to another hospital unit"). Data are presented in the same manner as the publication resulting from the original study. Table 4 presents the mean and SD of the nursing behaviors on the CBA which patients within this sample identified as most important when demonstrating caring. Table 5 presents the mean and SD of the nursing behaviors on the CBA which patients identified as least important when demonstrating caring.
Table 4

Summary Patients' Perceptions of Most Important Nurse Caring Behaviors (n = 40).

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean ± SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know how to handle equipment (e.g., monitors)</td>
<td>4.85 ± 0.53</td>
</tr>
<tr>
<td>Check my condition very closely</td>
<td>4.83 ± 0.45</td>
</tr>
<tr>
<td>Know how to give shots, IV’s, etc.</td>
<td>4.80 ± 0.56</td>
</tr>
<tr>
<td>Know when it’s necessary to call the doctor</td>
<td>4.78 ± 0.53</td>
</tr>
<tr>
<td>Know what they’re doing</td>
<td>4.73 ± 0.60</td>
</tr>
<tr>
<td>Make me feel someone is there if I need them</td>
<td>4.68 ± 0.53</td>
</tr>
<tr>
<td>Be kind and considerate</td>
<td>4.68 ± 0.53</td>
</tr>
<tr>
<td>Give my treatments and medications on time</td>
<td>4.68 ± 0.53</td>
</tr>
<tr>
<td>Treat me with respect</td>
<td>4.65 ± 0.58</td>
</tr>
<tr>
<td>Maintain a calm manner</td>
<td>4.65 ± 0.48</td>
</tr>
</tbody>
</table>
Table 5

Summary Patients' Perceptions of Least Important Nurse Caring Behaviors \((n = 40)\).

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean (\pm) SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit me if I move to another hospital unit</td>
<td>2.95 (\pm) 1.32</td>
</tr>
<tr>
<td>Talk to me about my life outside the hospital</td>
<td>2.98 (\pm) 1.10</td>
</tr>
<tr>
<td>Touch me when I need it for comfort</td>
<td>3.35 (\pm) 1.25</td>
</tr>
<tr>
<td>Ask me what I like to be called</td>
<td>3.48 (\pm) 1.22</td>
</tr>
<tr>
<td>Help me plan ways to meet these goals</td>
<td>3.58 (\pm) 1.24</td>
</tr>
<tr>
<td>Help me plan for my discharge from the hospital</td>
<td>3.60 (\pm) 1.34</td>
</tr>
<tr>
<td>Tell me what to expect during the day</td>
<td>3.65 (\pm) 1.30</td>
</tr>
<tr>
<td>Help me understand my feelings</td>
<td>3.70 (\pm) 1.11</td>
</tr>
<tr>
<td>Help me set realistic goals for my health</td>
<td>3.70 (\pm) 1.14</td>
</tr>
<tr>
<td>Don't become upset when I'm angry</td>
<td>3.83 (\pm) 1.15</td>
</tr>
</tbody>
</table>
An overall mean for each of the seven CBA subscales was calculated (Table 6). The highest ranked subscale was "Assistance with gratification of human needs". This subscale includes such items as "Knows how to handle equipment", "Check my condition very closely", and "Keep my family informed of my progress."

Table 6

Mean Rankings of CBA Subscales.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Subscale</th>
<th>Mean item score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Human needs assistance</td>
<td>4.68</td>
</tr>
<tr>
<td>2</td>
<td>Humanism/faith-hope/sensitivity</td>
<td>4.39</td>
</tr>
<tr>
<td>3</td>
<td>Supportive/protective/corrective environment</td>
<td>4.29</td>
</tr>
<tr>
<td>4</td>
<td>Existential/phenomenological/spiritual forces</td>
<td>4.09</td>
</tr>
<tr>
<td>5</td>
<td>Helping/trust</td>
<td>3.96</td>
</tr>
<tr>
<td>6</td>
<td>Teaching/learning</td>
<td>3.92</td>
</tr>
<tr>
<td>7</td>
<td>Expression of positive/negative feelings</td>
<td>3.80</td>
</tr>
</tbody>
</table>
The nonparametric Mann-Whitney U test and Kruskal-Wallis one-way ANOVA were used to examine responses to the CBA in relation to the demographic variables of sex, age, education level, previous CCU admissions, length of CCU stay, previous hospital admission, previous hospital admission with chest pain, and length of CCU stay.

The Mann-Whitney U test is a nonparametric statistical technique used to evaluate differences between two samples. Specifically, this test evaluates whether the summed ranks of one group are significantly different than those of the other group on the variable under study. For example, are the summed rankings of the male group significantly higher than the summed rankings of the female group on the various subscales? The Mann-Whitney U test makes an assumption of ordinal data, and is used when sample sizes are small and a normal distribution is not assumed.

Table 7 through Table 11 identifies the mean sum and the probability of difference for each demographic variable analyzed. As the U score moves farther from the mean sum, the probability of significance diminishes as the p value increases. As the U score moves closer to the mean sum, the probability of significance enhances as the p value decreases.

No significant findings were found at the preestablished p = 0.05 level. However, there were three findings that approached significance; the subscale,
"Humanism/faith-hope/sensitivity" had a p level of 0.07 by gender. When comparing patients who were in the hospital for the first time to those with previous admissions, two differences that approached significance were noted; the subscale "Expression of positive/negative feelings" with a p value of 0.08, and the subscale "Teaching/learning" with a p value of 0.08.

Table 7
Results of Mann-Whitney U Test on Subscale Comparisons with Sex.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanism/faith-hope/sensitivity</td>
<td>84.0</td>
<td>0.75</td>
</tr>
<tr>
<td>Helping/trust</td>
<td>121.5</td>
<td>0.57</td>
</tr>
<tr>
<td>Expression of positive/negative feelings</td>
<td>138.5</td>
<td>0.97</td>
</tr>
<tr>
<td>Teaching/learning</td>
<td>120.5</td>
<td>0.54</td>
</tr>
<tr>
<td>Supportive/protective/corrective environment</td>
<td>93.0</td>
<td>0.14</td>
</tr>
<tr>
<td>Human needs assistance</td>
<td>111.5</td>
<td>0.37</td>
</tr>
<tr>
<td>Existential/phenomenological/spiritual forces</td>
<td>121.5</td>
<td>0.57</td>
</tr>
</tbody>
</table>
Table 8
Results of Mann-Whitney U Test on Subscale Comparisons with Occupation.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>M sum = 159.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscale</td>
<td>U</td>
</tr>
<tr>
<td>Humanism/faith-hope/sensitivity</td>
<td>145.0</td>
</tr>
<tr>
<td>Helping/trust</td>
<td>127.0</td>
</tr>
<tr>
<td>Expression of positive/negative feelings</td>
<td>138.0</td>
</tr>
<tr>
<td>Teaching/learning</td>
<td>129.0</td>
</tr>
<tr>
<td>Supportive/protective/corrective environment</td>
<td>149.5</td>
</tr>
<tr>
<td>Human needs assistance</td>
<td>155.0</td>
</tr>
<tr>
<td>Existential/phenomenological/spiritual forces</td>
<td>134.0</td>
</tr>
</tbody>
</table>
Table 9

Results of Mann-Whitney U Test on Subscale Comparisons with First Admission to CCU.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>M sum = 199.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>First admission to CCU</td>
<td></td>
</tr>
<tr>
<td>M sum = 199.5</td>
<td></td>
</tr>
<tr>
<td>Subscale</td>
<td>U</td>
</tr>
<tr>
<td>Humanism/faith-hope/sensitivity</td>
<td>185.0</td>
</tr>
<tr>
<td>Helping/trust</td>
<td>173.5</td>
</tr>
<tr>
<td>Expression of positive/negative feelings</td>
<td>197.0</td>
</tr>
<tr>
<td>Teaching/learning</td>
<td>178.5</td>
</tr>
<tr>
<td>Supportive/protective/corrective</td>
<td>156.5</td>
</tr>
<tr>
<td>environment</td>
<td></td>
</tr>
<tr>
<td>Human needs assistance</td>
<td>163.0</td>
</tr>
<tr>
<td>Existential/phenomenological/</td>
<td>151.5</td>
</tr>
<tr>
<td>spiritual forces</td>
<td></td>
</tr>
</tbody>
</table>
Table 10

Results of Mann-Whitney U Test on Subscale Comparisons with Previous admission for Chest Pain.

Previous admit for chest pain $M$ sum = 175.5

<table>
<thead>
<tr>
<th>Subscale</th>
<th>$U$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanism/faith-hope/sensitivity</td>
<td>146.0</td>
<td>0.41</td>
</tr>
<tr>
<td>Helping/trust</td>
<td>173.0</td>
<td>0.95</td>
</tr>
<tr>
<td>Expression of positive/negative feelings</td>
<td>170.5</td>
<td>0.14</td>
</tr>
<tr>
<td>Teaching/learning</td>
<td>174.0</td>
<td>0.98</td>
</tr>
<tr>
<td>Supportive/protective/corrective environment</td>
<td>153.5</td>
<td>0.53</td>
</tr>
<tr>
<td>Human needs assistance</td>
<td>128.0</td>
<td>0.18</td>
</tr>
<tr>
<td>Existential/phenomenological/spiritual forces</td>
<td>129.5</td>
<td>0.19</td>
</tr>
</tbody>
</table>
Table 11

Results of Mann-Whitney U Test on Subscale Comparisons with First admission to Hospital.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>M sum = 102.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanism/faith-hope/sensitivity</td>
<td>82.5</td>
</tr>
<tr>
<td>Helping/trust</td>
<td>62.0</td>
</tr>
<tr>
<td>Expression of positive/negative feelings</td>
<td>56.5</td>
</tr>
<tr>
<td>Teaching/learning</td>
<td>55.0</td>
</tr>
<tr>
<td>Supportive/protective/corrective</td>
<td>77.0</td>
</tr>
<tr>
<td>Human needs assistance</td>
<td>81.5</td>
</tr>
<tr>
<td>Existential/phenomenological/spiritual</td>
<td>74.5</td>
</tr>
</tbody>
</table>
The Kruskal-Wallis one-way analysis of variance (ANOVA) is a nonparametric test that is based on ranking. The test requires converting the scores of the individual groups into one overall set of ranks. It is assumed that the underlying probability distribution is continuous. The Kruskal-Wallis ANOVA was used to determine if the subscales would be ranked differently when subjects were grouped by age, educational level, and length of CCU stay. No significant findings were found at the preestablished $p = 0.05$ level. However, one finding did approach significance. Within the subscale "Supportive/protective/corrective environment", length of CCU stay was almost significant with a $p$ value of 0.06. Table 12, Table 13, and Table 14 present these data.

The mean scores of those participants who completed the CBA independently ($n = 18$) and those whom the investigator read the tool aloud ($n = 22$) were compared using the Mann-Whitney U test. No significant differences were found ($U = 191.5$, $p = 0.86$).
Table 12

Results of Kruskal-Wallis one-way ANOVA Age by Subscales.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Age *df=4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X²</td>
</tr>
<tr>
<td>Humanism/faith-hope/sensitivity</td>
<td>1.98</td>
</tr>
<tr>
<td>Helping/trust</td>
<td>4.75</td>
</tr>
<tr>
<td>Expression of positive/negative feelings</td>
<td>7.18</td>
</tr>
<tr>
<td>Teaching/learning</td>
<td>3.13</td>
</tr>
<tr>
<td>Supportive/protective/corrective environment</td>
<td>1.03</td>
</tr>
<tr>
<td>Human needs assistance</td>
<td>1.16</td>
</tr>
<tr>
<td>Existential/phenomenological/spiritual forces</td>
<td>5.66</td>
</tr>
</tbody>
</table>

*df=degrees of freedom
Table 13

Results of Kruskal-Wallis one-way ANOVA Educational Level by Subscales.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Education level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subscale</strong></td>
<td>*df=7 X²  p</td>
</tr>
<tr>
<td>Humanism/faith-hope/sensitivity</td>
<td>5.66 0.58</td>
</tr>
<tr>
<td>Helping/trust</td>
<td>5.85 0.56</td>
</tr>
<tr>
<td>Expression of positive/negative feelings</td>
<td>12.75 0.79</td>
</tr>
<tr>
<td>Teaching/learning</td>
<td>5.10 0.65</td>
</tr>
<tr>
<td>Supportive/protective/corrective environment</td>
<td>5.38 0.61</td>
</tr>
<tr>
<td>Human needs assistance</td>
<td>7.86 0.35</td>
</tr>
<tr>
<td>Existential/phenomenological/spiritual forces</td>
<td>6.38 0.50</td>
</tr>
</tbody>
</table>

*df=degrees of freedom
Table 14

Results of Kruskal-Wallis one-way ANOVA Length of CCU Stay by Subscales.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Length of CCU stay *df=5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$X^2$</td>
</tr>
<tr>
<td>Humanism/faith-hope/sensitivity</td>
<td>2.53</td>
</tr>
<tr>
<td>Helping/trust</td>
<td>6.56</td>
</tr>
<tr>
<td>Expression of positive/negative feelings</td>
<td>0.72</td>
</tr>
<tr>
<td>Teaching/learning</td>
<td>3.84</td>
</tr>
<tr>
<td>Supportive/protective/corrective environment</td>
<td>10.46</td>
</tr>
<tr>
<td>Human needs assistance</td>
<td>6.16</td>
</tr>
<tr>
<td>Existential/phenomenological/spiritual forces</td>
<td>8.26</td>
</tr>
</tbody>
</table>

*df=degrees of freedom
Summary

This study is a replication of a study done by Cronin and Harrison (1988) using the Caring Behaviors Assessment (CBA). Nurse caring behaviors were identified by forty patients who have experienced myocardial infarction (MI). Reliability ranged from 0.69 to 0.89. Findings include identification of items such as "knows how to handle equipment", "check my condition closely", and "knows how to give shots, IV’s, etc." as most important nurse caring behaviors. "Talk to me about my life outside the hospital" and "visit me if I move to another hospital unit" were identified as least important nurse caring behaviors. Kruskal-Wallis one-way ANOVA and Mann-Whitney U test were used to examine responses to the CBA in relation to demographic variables. No findings at the $p = 0.05$ were noted.
CHAPTER V

Discussion

Discussion of Findings

The present research study replicated a study completed by Cronin and Harrison (1988), designed to determine which nursing behaviors patients perceived as caring. The design and methodology of the study was unchanged from the original study, including the sample population which were patients who had experienced a myocardial infarction (MI).

As in other studies (Larson 1981; Mayer 1987; von Essen and Sjoden 1991a, 1991b, 1995; Scharf and Caley 1993; Gooding, Sloan, and Gagnon 1993; Rosenthal 1992; Cronin & Harrison, 1988; Parsons, Kee, and Gray 1993; Stanfield, 1991; and Huggins, Gandy, and Kohut 1993), the findings of this study supported the findings of the original study.

The first research question asked, "What behaviors exhibited by nurses in the CCU are perceived by patients with MI as indicators of caring?" In the sample of clients, while larger than in the original study, they continued to identify the most important caring behaviors as those associated with competency. While patients in this sample ranked almost every nursing behavior on the instrument as contributing to feeling cared for and cared about, the most important contribution was "know how to handle equipment".
Within the other ten most important behaviors were skills associated with the stabilization of the patient immediately following an MI. Examples include "check my condition very closely", "know how to give shots, IV’s, etc." and "know when its necessary to call the doctor". Patients in this period of stress associated with a "heart attack", want to feel safe and secure and the demonstrated competency of the nurse facilitates this feeling.

The instrument (CBA) utilized to measure the behaviors associated with caring consisted of 63 behaviors. Among this sample of patients, 61 of the 63 behaviors were rated as important determinants of caring. On the five point Likert scale, only two behaviors "visits me if I move to another hospital unit" (M = 2.36) and "talk to me about my life outside the hospital" (M = 2.96) were rated as not important. If one believes that the needs of clients are influenced by the situation, then it would appear reasonable that patients who have just experienced an MI might be focused on more basic needs such as survival. They may not be questioning if they will be "moving to another hospital unit" or wondering "if they will have a life outside the hospital".

One difference between the results of the present study and the original study (Cronin & Harrison, 1988) was that the subscale "Human needs assistance" achieved slightly higher mean scores. In the Cronin and Harrison (1988) study
the mean score was 4.60, while in this sample the mean was 4.68. This minimal difference could be attributed to the higher modal age (the 71 to 80 age group) in the current study, while in the Cronin and Harrison (1988) study the mean age was 62.5 years. The difference of nearly a decade could contribute to an increase of insight that is normally associated with aging.

A similarity to the original study was that the behaviors within the subscale "Expression of positive/negative feelings" achieved the same placement. In this study the mean score was 3.80, and ranked seventh in importance, which was the same mean (3.80) as in the original study (Cronin & Harrison, 1988).

The second research question addresses, "Which nurse caring behaviors are perceived as most important and least important by patients with MI?" The nursing behaviors identified as contributing most to an awareness of feeling cared for or cared about were identified (see Table 4). The patients in this study focused on those behaviors which focused on monitoring and demonstration of competence. High visibility of the nurse contributes to the patients sense of security and well-being. The nursing behaviors identified as contributing least to an awareness of feeling cared for or cared about were identified (see Table 5). If these factors are examined, many are associated with supportive behaviors. While still rated as being important, these
patients categorized the supportive behaviors as less important. Their ratings were supported by the subjects' verbal comments. When the investigator was administering the data gathering instrument, patients commented that they no longer expect the extras to be provided by nurses. One patient stated that "It would be nice, but I know the nurses don’t have time". This finding is very interesting when one considers that in nursing education a great deal of emphasis is placed on the need for, and the process of, providing supportive care. The initial explanation might be that with health care reform, the expectations of patients has been refocused to cost containment. However, considering that the majority of the studies reviewed also had similar findings, and that these studies occurred over an extended period of time, it may be that the curriculum of schools of nursing need to reexamine the priority placed on various nursing behaviors during the learning process. Patients in this sample placed value on 61 of the 63 identified caring behaviors, but emphasis needs to be placed on nursing skills and confidence.

The third research question asks whether or not demographic variables influence perceptions. No significant findings resulted in relation to comparison with the demographic variables of age, sex, occupation, level of education, number of days in CCU, previous hospital admission for chest pain, or previous admissions to the CCU
at the significance level of $p < 0.05$ (see Table 5). Although no findings of statistical significance were found, three findings approached the significance level. Those three subscales were "Humanism/faith-hope/sensitivity"; "Expression of positive/negative feelings"; and "Teaching/learning".

The subscale "Humanism/faith-hope/sensitivity" had a significance level of $p = 0.07$. There was a demonstratable, if not significant, difference between the male and female in the sample. More than two/thirds ($n = 31$) of the population was male. Perhaps, if the sample population had been larger, and of a normal distribution, the significance level would have reached $p = 0.05$. The difference between the responses of the male participants and the responses of the female participants, may have been due to the nurse caring behaviors identified within the subscale. Behaviors such as; "treat me as an individual", "know what they are doing", "treat me with respect", and "be sensitive to my feelings and moods" may have been more valued by the female participants. Or perhaps, the male participants were more frightened by the actual event of "heart attack", since in our society continues to associate heart attacks are associated as a male phenomenon. Men have a overwhelming feeling of responsibility in their life and perhaps, they placed more value on faith and hope after living through this event.
Another finding that approached the significance level, was the difference between the group of patients who had previously suffered an MI, and those for whom it was their first admission to the hospital. Two subscales reached a significance level $p = 0.08$. The subscales involved were the subscale, "Expression of positive/negative feelings", and the subscale, "Teaching/learning". Possibly, participants undergoing their first experience in the hospital, may have had different expectations of nurse caring behaviors, or it may be that patients undergoing their first experience in the hospital environment, were not comfortable expressing their positive or negative feelings about the event. It is possible that the identification of caring behaviors was not something on which they were focusing their thoughts. It also is possible that patients may have been unsure what the investigator was going to do with the information, and believed it would be better not say anything negative concerning their CCU experience. The focus of their attention may have been of sustaining life. Participants with previous experience in the hospital might have insight from previous hospitalizations as to which behaviors were the most important nurse caring behaviors.

Table 14 indicated that the length of CCU stay impacted the "Supportive/protective/corrective environment" subscale. The difference between the two groups as determined by the length of CCU stay almost achieved significance at the 0.06
level. Perhaps, those participants who stayed longer in CCU had more insight into what to expect during the day, an increased need for support, or recognized the impact of the influence of the environment. If the sample had been larger, the p value may have reached 0.05.

Research question four asks, "Will this study validate the study done by Cronin and Harrison (1988)?" Table 15 compares patients' perceptions in six out of the ten most important nurse caring behaviors compared to the study done by Cronin and Harrison (1988). The participants in the current study rated individual CBA items similarly to those participants in the Cronin and Harrison (1988) study. These findings are consistent with similar studies of patients' perceptions as noted in the literature review (Larson 1981; Mayer 1987; von Essen and Sjoden 1991a, 1991b, 1995; Scharf and Caley 1993; Gooding, Sloan, and Gagnon 1993; Rosenthal 1992; Parsons, Kee, and Gray 1993; Stanfield, 1991; and Huggins, Gandy, and Kohut 1993).

Table 16 compares patients' perceptions in five out of the ten least important nurse caring behaviors compared to Cronin and Harrison (1988). Again, the participants in the current study, rated individual items in the CBA similarly to those participants in the Cronin and Harrison (1988) study. Again, the rankings in this study were consistent with previous studies, with "visit me if I move to another hospital unit" actually rated least important from the 63
CBA items (Parsons, Kee, and Gray 1993; Stanfield, 1991; and Huggins, Gandy, and Kohut 1993). It may be, as suggested earlier, that in the seven years since the original study patients place less value on the extra comforts. Patients today seem to be cognizant that hospital stays are of shorter duration, that nurses have more responsibility due to recent changes in skill mix, and that patients are assuming more responsibility related to the cost of care.

Table 15


<table>
<thead>
<tr>
<th>Item</th>
<th>Cronin &amp; Harrison Mean ± SD</th>
<th>Ward Mean ± SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know what they're doing</td>
<td>4.86 ± 0.47</td>
<td>4.73 ± 0.60</td>
</tr>
<tr>
<td>Make me feel someone is there if I need them</td>
<td>4.86 ± 0.35</td>
<td>4.68 ± 0.53</td>
</tr>
<tr>
<td>Know how to give shots, IV's, etc.</td>
<td>4.77 ± 0.61</td>
<td>4.80 ± 0.56</td>
</tr>
<tr>
<td>Know how to handle equipment</td>
<td>4.77 ± 0.61</td>
<td>4.85 ± 0.53</td>
</tr>
<tr>
<td>Know when it's necessary to call the doctor</td>
<td>4.77 ± 0.61</td>
<td>4.78 ± 0.53</td>
</tr>
<tr>
<td>Be kind and considerate</td>
<td>4.68 ± 0.57</td>
<td>4.68 ± 0.53</td>
</tr>
</tbody>
</table>
Table 16


<table>
<thead>
<tr>
<th>Item</th>
<th>Cronin &amp; Harrison M ± SD</th>
<th>Ward M ± SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit me if I move to another hospital unit</td>
<td>2.36 ± 1.36</td>
<td>2.95 ± 1.32</td>
</tr>
<tr>
<td>Ask me what I like to be called</td>
<td>2.96 ± 1.36</td>
<td>3.48 ± 1.22</td>
</tr>
<tr>
<td>Talk to me about my life outside the hospital</td>
<td>3.59 ± 1.22</td>
<td>2.98 ± 1.10</td>
</tr>
<tr>
<td>Touch me when I need it for comfort</td>
<td>3.59 ± 1.37</td>
<td>3.35 ± 1.25</td>
</tr>
<tr>
<td>Don’t become upset when I’m angry</td>
<td>3.26 ± 1.40</td>
<td>3.83 ± 1.15</td>
</tr>
</tbody>
</table>

Table 17 shows remarkable consistency between the original study done by Cronin and Harrison (1988) and this study with six of the seven subscales. The subscale "Human needs assistance" ranked highest in both. Possible explanations for the subscale "teaching/learning" being ranked second in Cronin and Harrison (n = 22) and being ranked sixth in this study (n = 40), could be that this sample of patients had a higher educational level and were older. In this study, 87.5% (n = 35) had a high school diploma or better. Participants may have felt "teaching/learning" was not as important due to the increase knowledge obtained from education and life experiences.
Table 17

Comparisons of CBA Subscales Mean and Ranking with C & H
(Cronin and Harrison, 1988) and Ward (1995).

<table>
<thead>
<tr>
<th>Rank</th>
<th>C &amp; H n=22</th>
<th>Ward n=40</th>
<th>C &amp; H</th>
<th>Ward</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subscale</td>
<td>M item score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Human needs assistance</td>
<td>4.60</td>
<td>4.68</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Teaching/learning</td>
<td>4.39</td>
<td>3.92</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Humanism/faith-hope/sensitivity</td>
<td>4.30</td>
<td>4.39</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Existential/phenomenological/spiritual forces</td>
<td>4.18</td>
<td>4.09</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Supportive/protective/corrective/environment</td>
<td>4.12</td>
<td>4.29</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Helping/trust</td>
<td>3.88</td>
<td>3.96</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Expression of positive/negative feelings</td>
<td>3.80</td>
<td>3.80</td>
<td></td>
</tr>
</tbody>
</table>
In this sample, 57.5% (n = 23) of the patients were age 71 or greater. Another factor contributing to the difference, may be whether patients have had a previous CCU admission. In the current study, 52.5% (n = 21) of participants, had a previous CCU admission and 85% had been hospitalized previously, compared with 40.9% (n =9) in the Cronin and Harrison (1988) study. Participants who have been in the CCU before may not believe that additional teaching or learning is actually necessary. Previous hospital admission was not identified as a variable in the original study (Cronin and Harrison 1988). If included in the original study different results related to this subscale might have resulted. The other subscales were consistent with the results obtained by the original study (1988).

The final research question addresses whether this patient sample validates Watson’s Theory of Human Science and Human Care (1988). This study did validate Watson’s Theory of Human Science and Human Care as intended, and added to empirical knowledge. The findings from this study were similar to those of the original study done by Cronin and Harrison (1988) which validated Watson’s (1988) Theory. The data collection instrument was developed by Cronin and Harrison based on Watson’s theory of caring. The CBA subscales are based on Watson’s Ten Carative Factors. The seven CBA subscales were arranged according to Watson’s
(1979) ten carative factors and are congruent with the tool. Sixty-one of 63 items on the CBA tool, were rated above "3", on the Likert scale. Participants in the current study, defined these 61 caring behaviors as "somewhat important", "important", and "most important". The two CBA items that were rated below "3" (or not important), were items within the subscale "helping/trust". Of these sixty-one items, the caring behaviors identified were found by this patient population to be indicators of caring. As the nurse is made aware of client expectations, it will be easier to fulfill client expectations.

Stanfield (1991) tested the CBA tool to determine validation of Watson’s (1979) Theory. Factor analysis was utilized to inductively reason the relationship of the CBA’s seven subscales and Watson’s (1979) ten carative factors. The factor analysis failed to discriminate the seven distinct subscales as developed by the instrument’s authors. Stanfield states, "caring involves all nursing behaviors aimed in meeting patients’ basic human needs and teaching-learning needs. In addition, the caring nurse strives to develop a nurse-patient relationship aimed at building the patient’s trust and is sensitive to the unspoken psychosocial needs" (1991, p. 117). Stanfield did determine that the CBA tool has proven to be a valid and reliable instrument to measure the concept of caring. Although the existence of 10 discreet carative factors and seven
distinctive subscales were not supported, the framework is sufficient in the discussion of caring.

In this study, the CBA was found to be a valid and reliable research instrument. Reliability coefficients ranged from 0.69 to 0.89 on the seven CBA subscales. No significant differences were found in the results when the tool was read aloud to participants and when they completed the tool independently. This finding makes the CBA valuable for a variety of patient populations, and allows for further research to be conducted. This finding was surprising in that, reading the questions to the patients took an additional 20 to 45 minutes to administer the instruments. Participants would ask the investigator the meaning of some of the items on the CBA tool. The explanations given by the researcher reinforced that the patient should rate the importance of the item. Twenty two (55%) questionnaires were completed by the investigator. It is estimated that the other eighteen (45%) participants had help from family, friends or the direct care nurse when the tool was left at the bedside by the investigator.

Patients in this study stayed an average of 3.78 days in the CCU and 24 to 36 hours post CCU. Nurses need to prepare patients to cope with the changes due to this life event. Five days is very little time to accomplish this task. With the reality of shorter stays, nurses must be highly proficient in technical skills, to improve the
patient outcome following an MI. The nurse caring behaviors which fit into the classification of low visibility nursing actions, (actions people do not see ie; treating another person with respect and taking time to really listen) and may not be the highest priority with patients of today, but if these nursing actions are not demonstrated, the patient may feel angry and not cared for or cared about. This study confirms that 61 out of 63 nurse caring behaviors identified on the CBA tool, including the low visibility nursing actions, were important in the delivering nursing care to our present health care consumer.

Limitations of the Instrument

Limitations of the instrument include the length of the instrument, and the variability in the number of items per subscale. The number of items in each subscale range from three to 16. Continued testing and refinement of the CBA is recommended.

Limitations of the Study

Limitations of this study include the following. While this sample size was almost double that of the original sample, a significantly larger sample needs to be obtained in the future. The sample size was small (n=40) and limits the conclusions that can be drawn. This sample size may have diminished the external validity and decreased the generalizability to the non-study population. With a larger
population, the sums of the rankings would most likely indicate a normal distribution.

The sample size was influenced by a number of factors. The facility where the data were gathered includes a cardiac catheterization unit, but does not have facilities for open heart surgery or balloon dilation. Not having these services restricted the availability of participants. When the identified procedures were required, there was an immediate transfer to a larger, better equipped facility. Also, many subjects were not feeling well enough to participate in the study due to the decreased length of stay following a MI.

This investigator would recommend waiting until the patients were home after release from the hospital. The participants would feel better and it would be easier to obtain consent from these patients when they are feeling better. It would also increase the sample size with this method.

Significance of the Study

On reflection, this study has added to nursing’s knowledge related to the population of patients who have experienced MI, and the value placed on nurse caring behaviors by hospitalized patients. Patients in this study asked many questions and seemed desirous of assisting in the control of their illness outcomes. Patients in this study validated that they want nurses to "know what they are
Consumers want nurses that are highly skilled, follow through, are considerate, and instruct. In other words, behaviors which facilitate the most cost effective illness experience.

**Suggestions for Further Study**

Replication studies, based on the CBA have occurred only in in-patient settings. These study populations include patients with MI (Cronin & Harrison, 1988), patients in the perioperative domain (Parsons & al., 1993), patients in the emergency department (Huggins & al., 1993) and patients admitted on medical-surgical units (Stanfield, 1991). When the CBA was utilized with outpatients, the instrument was altered, and did not utilize the "Existential/phenomenological/spiritual forces" subscale. By omitting parts of the instrument, comparisons between results cannot be made. Therefore, patient studies using the original CBA need to be completed with varying patient populations in a variety of settings.

Thus far, the CBA has been utilized primarily in the hospital environment. Would results continue to reveal the technical or instrumental behaviors as most important, by long term care, ambulatory care, or preventive care patients? Would the response, "knows what they are doing", continue to have the ranking of most important nurse caring behavior with these alternative patient populations? As managed care and capitated reimbursement payment systems
become the norm, and patients staying even shorter time periods, it will be imperative that nurses respond to patient expectations of nurse caring behaviors.

Also, further testing using factor analysis of the individual items and the seven subscales needs to occur. Factor analysis would provide clarity concerning the validity of the subscales within the current instrument.

Several questions, which could lead to further research, arose from this study. Did the participants evaluate care, rather than respond to the request to identify nurse caring behaviors? This question is posed based on comments made by the participants whom the investigator assisted in completing the CBA. Examples of comments made include; "they didn't do that for me", "I didn't expect that", or "they were always doing that for me". Parsons, Kee, and Gray (1993) came to the same conclusion stating, "subjects may have responded to the items in terms of what their nurses actually did for them rather than how important the behavior was" (p. 1112). More information is needed about the usability of the CBA with extremely ill patients.

Additional research using the CBA needs to occur in academia. Are nurse educators aware of what patients describe as most caring? Are students taught what constitutes important nurse caring behaviors from the patient perspective? Future nurses need to be prepared to
meet changing expectations of patients. Patients are staying in hospitals shorter time periods, and have expectations of having care delivered by highly skilled professionals.

There is need for nursing to validate theories which are currently being taught and utilized as a guide to nursing practice. The current study adds to theoretical knowledge in the investigation of the measurement of the caring concept. As nurses become more aware of patients’ perceptions of nurse caring behaviors, it will be easier for the nurse to deliver the care patients expect.
REFERENCES


Larson, P. J. (1981). Oncology patients’ and professional nurses’ perceptions of important nurse caring behaviors. University Microfilms International. (University Microfilms No. 8116511).


von Essen, L., & Sjoden, P. (1991a). The importance
nurse caring behaviors as perceived by Swedish hospital
patients and nursing staff. *International Journal Nursing

perceptions of caring: review and replication. *Journal of
Advanced Nursing, 16*, 1363-1374.

importance of caring behaviors to Swedish psychiatric
inpatients and staff, with comparisons to somatically-ill

occurrence and importance of caring behaviours among
patients and staff in psychiatric, medical and surgical

Watson, J. (1979). *Nursing: The philosophy and science
of caring*. Boston: Little and Brown.

Nursing.

Dimensions of nurse caring. *IMAGE: Journal of Nursing
Scholarship, 26*(2), 107-111.

hypothesis: Toward explanation and prediction. In N. F.
Woods, & M. Catanzaro (Ed. pp. 166-188). *Nursing research

APPENDIX A:

Permission to Use Instrument
March 6, 1992

LaRae Ward
228 Scenic Dr. East
Washington, UT 84780

Dear LaRae:

Thank you for your interest in the Caring Behaviors Assessment. Enclosed is a copy of the tool and additional information regarding its development. Please feel free to use the CBA. In return, we ask that you acknowledge its authorship (reference to the Heart and Lung article is sufficient) and, upon completion of your work, please send us a copy of your abstract. We would also appreciate the results of any further reliability and validity testing of the CBA.

We will be most interested in your findings. If we can answer any questions or be of any further assistance, please feel free to contact us.

Sincerely,

Sherill Nones Cronin, RN, C, MSN
Assistant Professor

Barbara Harrison, RN, C, MSN
Assistant Professor
September 21, 1994

LaRae M. Ward  
228 Scenic Drive East  
Washington VT 848780

Dear Ms. Ward:

I am writing in response to your letter of September 11, 1994 regarding use of the Caring Behaviors Assessment (CBA) in your thesis research. You have my permission, and that of my co-author, Barbara Harrison, to use the CBA in your research. We ask only that you send us a copy of your results, as well as the results of any reliability or validity testing you may do on the tool.

However, we do not give permission to include the CBA in its entirety in the manuscript that goes to University Microfilms, Inc. for reproduction. We prefer that investigators contact us for the tool so that we can compile data on its use. I have altered your permission form to reflect this.

If you have any questions or need further information, please feel free to call me at (502) 452-8215.

Good luck with your research. I'll be anxious to see your results.

Sincerely,

 SHERILL NONES CRONIN  
LANSING SCHOOL OF NURSING  
Sherill Nones Cronin, PhD, RN, C  
Associate Professor

SNC/bsm  
Enclosure
Permission to Use Copyrighted Material

I, Sherill Nones Cronin, holder of copyright on material entitled "Caring Behaviors: Assessment" authored by S. N. Cronin & B. Harrison and originally published in Heart & Lung, Vol. 17, #4, 1988, pp. 374-380 hereby give permission for the author to use the above described material in total or in part for inclusion in a master's thesis/doctoral dissertation at the University of Nevada, Las Vegas.

[Signature]
Sherill Nones Cronin 9/21/94
Signature Date

Sherill Nones Cronin, PhD, RN, C
Associate Professor
Name (typed) Title

Representing

The Graduate College
University of Nevada, Las Vegas
4505 Maryland Parkway
Box 451017
Las Vegas, NV 89154-1017
Appendix B:
Demographic Information
DEMOGRAPHIC INFORMATION

PLEASE ANSWER EACH QUESTION:


2. Male______ Female______

3. Occupation: Retired______,
   Other______________________________

4. Highest grade level of education: 8____, 9____, 10____, 11____, 12____, 13____, 14____, 15____, 16____, greater than 17____.

5. Number of days in coronary care unit____.

6. Previous admission to a coronary care unit
   YES____  NO____.  When______________?

7. Prior admission to hospital for chest pain
   YES____  NO____.  When______________?

8. Prior admission to hospital  YES____  NO____.
   When______________?
APPENDIX C:

Human Subject Rights Approval
UNIVERSITY OF NEVADA-LAS VEGAS

PROTOCOL FORM

FOR RESEARCH INVOLVING HUMAN SUBJECTS

INVESTIGATORS: List person principally responsible for the investigation on line a). If principal investigator is a student, list faculty advisor on line b).

a) LaRae M. Ward, RN  
   Department: Nursing  
   Phone: (702)895-3360

b) Rosemary Witt, RN, PhD. 
   Department: Nursing  
   Phone: (702)895-3360

c) 

d) 

UNLV status of Principal Investigator (circle): Faculty/Post-doctoral/Graduate/Undergraduate/Other

TITLE OF PROJECT: IMPORTANCE OF NURSE CARING BEHAVIORS AS PERCEIVED BY PATIENTS AFTER MYOCARDIAL INFARCTION: a replication study

NAME AND ADDRESS of sponsoring agency or foundation (if other than UNLV):

CONTRACT OR GRANT NUMBER (if known)

DURATION OF STUDY (Protocols must be renewed annually): 12/8/94-5/28/95

TYPE OF SUBMISSION: X New Renewal (attach progress report)
                     Continuation Modification
                     Previous Log # (if any)

LOCATION(s) OR FACILITIES where study will take place: Dixie Regional Medical Center 544 south 400 East, St. George, UT 84770

11/30/94
Date

LaRae M. Ward
Principal Investigator’s Signature

11/30/94
Date

Rosemary Witt
Faculty Advisor’s Signature (if warranted)

BE SURE TO COMPLETE PAGE 2
SUBJECTS: (Please estimate numbers.)

___ Patients as experimental subjects
___ Patients as controls
___ Minors (under 18)
___ UNLV Students
___ Pregnant women or fetuses
___ Mentally disabled

40 TOTAL ANTICIATED SUBJECTS

PROCEDURES: (ATTACH relevant materials, such as questionnaires, interview schedules, written test instruments, etc.)

X Survey, questionnaire(s)
   X Interview: phone/in-person
___ Medical or other personal records
___ Filming, taping, recording
___ Observation
___ Participant observation
___ Anthropological fieldwork
___ Psychological intervention
___ Incomplete disclosure of purpose
___ Payment of subjects
___ Costs to subjects/third parties

Investigational Drug*
Approved Drug, New Use*
Investigational Device (Attach relevant info.)
Placebo
Ionizing Radiation (Attach CURRENT approval)
Surgery
In vitro fertilization
Venipuncture
Other body fluids, excreta
Abortus, placenta, excess tissue

*Provide FDA Authorization and IND Number
DATE: November 30, 1994

TO: LaRae M. Ward (NUR)
    M/S 3018

FROM: Dr. William E. Schulze, Director
       Research Administration

RE: Status of human subject protocol entitled:
    "Importance of Nurse Caring Behaviors as Perceived by Patients after Myocardial Infarction"

OSP #501s1194-397

The protocol for the project referenced above has been reviewed by the Office of Research Administration, and it has been determined that it meets the criteria for exemption from full review by the UNLV human subjects committee. Except for any required conditions or modifications noted below, this protocol is approved for a period of one year from the date of this notification, and work on the project may proceed.

Should the use of human subjects described in this protocol continue beyond a year from the date of this notification, it will be necessary to request an extension.

cc: Rosemary Witt (NUR-3018)
    OSP File
UNIVERSITY OF NEVADA, LAS VEGAS

PROTOCOL FORM APPROVAL SHEET
FOR RESEARCH INVOLVING HUMAN SUBJECTS

Log Number: __12-1-94_____________

Title of Project: __Importance of nurse caring behaviors as perceived by patients after myocardial infarction: a replication study ____________

Investigator: __LaRae M. Ward & Rosemary Witt______________________

After reviewing this proposal, the members of the Department of Nursing ________________________________
Review Committee have indicated below their approval/disapproval of this proposal.

Signature of Committee Members

<table>
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<tr>
<th>Name</th>
<th>Approve</th>
<th>Disapprove</th>
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<td>Margaret Lee</td>
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<td></td>
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<td>Judy McCauley</td>
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The above named project is hereby approved/disapproved (circle one).

Date: 12/2/94

Committee Chairperson's Signature
January 13, 1995

LaRae Ward, R.N.

St. George, Utah 84770

RE: IMPORTANCE OF NURSE CARING BEHAVIORS AS PERCEIVED BY PATIENTS AFTER MYOCARDIAL INFARCTION A REPLICATION STUDY.

Dear LaRae:

The IRB Committee of Dixie Regional Medical Center has considered your study of The Importance of Nurse Caring Behaviors as Perceived by Patients after Myocardial Infarction. We have approved conducting this study.

Sincerely,

Craig L. Booth, M.D.
Co-Chairman IRB Committee

CLB/Ir

MS/Ir
APPENDIX: D

Letter to Participant
Dear Patient,

My name is LaRae Ward, I am a registered nurse currently pursuing a Masters degree at the University of Nevada, Las Vegas. My thesis involves studying what patients who have experienced a myocardial infarction (heart attack), perceive as nurse caring behaviors.

I am asking you to assist me in this study by completing the attached questionnaire and consent form. This should take approximately 30 minutes to complete.

You are no way obligated to participate in this study and may withdraw at any time. You will not suffer any consequences if you choose not to participate. All responses are completely anonymous and the results will only be reported as group data. I am the only person who will see or have access to the completed questionnaires. There is no risk involved to you for participating. Thank you very much for agreeing to participate.

LaRae M. Ward, BSN, RN.
UNLV Department of Nursing
(702)895-3360
APPENDIX: E

Informed Consent Form
CONSENT TO PARTICIPATE IN A RESEARCH STUDY
UNIVERSITY OF NEVADA, LAS VEGAS
DEPARTMENT OF NURSING

TITLE OF STUDY: Importance of Nurse Caring Behaviors as Perceived by Patients after Myocardial Infarction: A Replication study

LaRae M. Ward R.N. B.S.N.
Graduate Student

PURPOSE of the Study

You are being asked to participate in a research study. The purpose of this study is to determine which nursing behaviors are viewed as caring by patients.

PARTICIPANTS

Because you are a patient who has experienced a myocardial infarction or "heart attack", you are being asked to participate in a study. Although participating in this study will not be of immediate benefit to you, the information you contribute may benefit future patients by making nurses more aware of what nurse behaviors, patients identify as caring and helpful in their recovery.

PROCEDURES

If you choose to participate in this study, you will be asked to complete a demographic questionnaire and the Caring Behaviors Assessment (CBA). This will take you about 30 minutes to complete.

There is no cost to you to participate in this study.

ALTERNATIVES

No treatment or service that you would normally receive is being changed for participants in this study. If you have any questions, please contact the investigator listed below.

RISKS

No risks have been identified for those persons participating in this study. If you have any questions, please contact the investigator listed below.
CONFIDENTIALITY

Your participation in this project is completely voluntary and you may withdraw at any time from the study. Your questionnaire will be marked with a number, not your name, and the questionnaires will be kept in a locked file cabinet. Only the investigator will have access to the questionnaires, and the information will be destroyed when reports of the study are completed. No names will be used in any report.

RIGHT TO REFUSE OR WITHDRAW

You may refuse to participate and still receive the care you would receive if you were not in this study. You may change your mind about being in the study and quit after the study has been started.

QUESTIONS

If you have further questions, please ask. If you have questions later, I can be contacted at: LaRae M. Ward; work (801) 634-4430 or home (801) 628-4954. You may contact by mail Rosemary Witt RN PhD. Department of Nursing 4505 S. Maryland Parkway, Las Vegas NV 89154.

You will be given a signed and dated copy of this form to keep.

*****

YOUR SIGNATURE BELOW INDICATES THAT YOU HAVE DECIDED TO VOLUNTEER AS A PARTICIPANT IN THE STUDY DESCRIBED ABOVE AND THAT YOU HAVE READ THE INFORMATION PROVIDED ABOVE.

__________________________  _______________________
Signature of Subject        Date

__________________________  _______________________
Signature of Investigator   Date