PATIENTS', NURSES', AND PHYSICIANS' PERCEPTIONS
OF QUALITY NURSING CARE

by

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Ada Sue Hinshaw
ADA SUE HINSHAW
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DEDICATION

"Gratitude is a memory of the heart."

Massieu

This thesis is affectionately dedicated to my parents and best friends, Milton and Grace Oakes, who have given me many "memories of the heart." Their exceptional wisdom, endless understanding and infinite love has enhanced my love for nursing and education, my joy in living, and my utmost pride for my beloved parents.
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"It is when you give of yourself that you truly give."

Kahlil Gibran

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ABSTRACT

The purpose of this study was to test which attributes of nursing care were valued among three subpopulations: patients, nurses, and physicians. By revealing these desired characteristics, efforts may be directed toward fulfilling these perceptions. Several attributes of nursing care were delineated from the review of the literature. The characteristics valued by each subpopulation were theoretically predicted.

A mathematical, correlational design was used in this study. The twelve nurses in the labor and delivery suite were evaluated by patients, physicians, and the nurses themselves on eleven characteristics of quality nursing care.

The results indicated that the valued attributes which make up quality nursing care did vary in the perceptions of patients, nurses, and physicians. The caring role was essential to all three groups. The curing aspect was found to be important to both patients and physicians, whereas, the coordination role was found to be important to the nurses.
CHAPTER 1

INTRODUCTION

The growing demand and increasing expectations for adequate, quality health care has stimulated much discussion and research into such areas as accountability, responsibilities of the many health team disciplines, and the need for improvement. The American Nurses' Association and the American Medical Association are continually striving to discover the avenues of improvement needed to deliver the optimum levels of health care to all individuals.

The term "quality nursing care" has invaded the literature and is becoming an everyday household term to many nursing professionals. What is quality nursing care? Is it the "super nurse" who can give eight bed baths, change six dressings, and distribute thirty-two medications in an eight-hour shift? Or, is it the warm hand and empathetic eyes in times of fear or suffering? Or, is it the person who has completed a baccalaureate degree or, even better, a masters' degree in nursing? This overused term has yet to find a consensus of its necessary components.

Today's nurses have expanded into many roles. To some, nurses are healers; to others, comforters; still others look at nurses as instructors. Nurses are expanding the scope of professional responsibility and accountability. At no other time has evaluation of nurses' performance been as highly emphasized. But, who shall be the evaluators?
This research study is designed to investigate the perceived attributes of quality nursing care as seen by the three subpopulations who have direct contact and observation of nursing performances, that is, patients, physicians, and the nurses themselves. For the purpose of this study, quality nursing care is defined as the degree of excellence that is rendered in the actual service or care given to patients. It encompasses all aspects of the multifunctional nursing role. By unveiling valued nursing characteristics of quality nursing care, possible pathways for achieving these attributes may be explored.

**Statement of the Problem**

What similarities and differences exist among the three subpopulations of patients, nurses, and physicians, concerning their perceptions of the important characteristics of quality nursing care?

**Purpose of the Study**

The purpose of this study is to test for those attributes of quality nursing care which are considered important by each of the three subpopulations: patients, nurses, and physicians. Predictions of characteristics that will be chosen by each group is done after an extensive search of the literature. A separate model is devised for each group's predicted variables. By comparing the theoretical and empirical models, similarities and differences among the three subpopulations can be identified.
Significance of the Problem

Evaluation is an essential tool for improving health care. The evaluators should be those who know and are affected by the nurses' functioning abilities; namely, patients, physicians, and nursing colleagues. Evaluation leads to identification of the similarities and differences in perceptions of important characteristics of quality nursing care.

It is particularly important to identify the incongruencies in the patients', nurses', and physicians' perceptions of quality nursing care. Expectations of nursing care are based upon these perceptions where there are wide deviations in values and expectations, tensions may result. As Thompson, Miller and Bigler (1975, p. 222) state, "Conflicts may arise in any system if there are different expectations of the roles held by members of the role set." If patients desire nurses to render emotional support, while nurses focus on technical task performance, tensions may arise. If physicians expect nurses to coordinate services and exert leadership, while the nurses focus on their own professional problem solving abilities, conflicts are likely to occur. To function as a collaborative team, assessment and understanding of each group's valued characteristics of quality nursing care is needed. When tensions and conflicts are known and understood, actions may be directed toward minimizing their negative consequences on quality nursing care. As Hughes, Hughes and Deutscher (1958, p. 162) contend, "Doctors, like nurses, define their roles and that of the nurse differently in different settings. When the expectations which the two groups have of each other are mutually shared, they can operate effectively and efficiently as a team on behalf of the patient."
This research study does not pretend to deal with these conflicts and tensions. Its purpose is to provide the basic groundwork by identifying similarities and differences in patients', nurses', and physicians' perceptions of quality nursing care.

**Theoretical Framework and Review of the Literature**

Today's growing societal demands for quality of health care has encouraged government, local agencies, and hospitals to develop and implement standards of patient care. Nursing audits, Professional Standards Review Organization, along with various scales such as the Slater Nursing Competencies Rating Scale (Wandelt and Stewart, 1975) and Risser's (1975) Patient Satisfaction Tool, have been utilized to judge the quality of care received by patients. For comprehensive and efficient evaluation, opinions from various health team members, including patients must be employed. As Donabedien (1969, p. 1835) states:

There is general agreement that each profession is solely competent to judge the quality of care provided by its members. However, as the concerns broaden to include the total care of the individual patients, it will become necessary to develop methods that require joint assessment by the representatives of several disciplines.

There is wide variation in the way that individuals perceive the same events. Each person brings a complex of assumptions, cultural beliefs, and prior experiences to each situation. Wolff (1953, p. 39) notes that "Perceptions depend upon a multiplicity of factors including the individual's genetic equipment, basic needs and longings, earlier conditioning influences, and a host of life experiences and pressures."
From the time of birth each person is molded, processed, and socialized into a culture. Familial traditions and teachings, peer influences, societal beliefs and expectations all contribute to the ever evolving development of personality and perceptions.

Patients enter the hospital with prior culturally conditioned beliefs of their "sick role" and the role of health care professionals. They carry socially engrained expectations of the health care team members. As Mumford and Skipper (1967, p. 20) state, "Our culture directs us to certain assumptions, leads us to esteem certain goods and certain acts and hold others in contempt."

Each profession has developed its own particular subculture. It unfolds its own formal and informal rules, laws, traditions, and customs. Frequently, a separate language or jargon evolves (Thompson et al., 1975).

Nursing, as well as medicine has emerged as a unique subculture. The norms and expectations of these professions are socialized into each neophyte through education, and experiences. Both nurses and physicians possess unique perceptions of their own roles, as well as the roles of other health care professionals. Nurses tend to value certain attributes of nursing care more highly than others. Physicians likewise hold value judgments based upon their professional socializing practice.

The role of nurses encompasses many aspects, with different expectations from various groups of people. Schulman (1958) contends that nurses' principle roles are being a "mother surrogate" and a "healer." The healing role includes skilled technical care involved in the therapeutic process of advancing the patient along the health/illness continuum. The multifunctional role of the "mother surrogate" characterizes
nurses' affection, support, and insurance of the patient's well-being. Johnson and Martin (1958) distinguish between the instrumental and expressive aspects of nursing. The instrumental role stresses the patient's return to wellness, whereas, the expressive role manages the tensions that develop in the therapeutic milieu. Reference to the difference between curing and caring is frequently used in differentiating nursing activities. Curing primarily concerns diagnosing and treating, the caring involves attending to the emotional well-being and comfort of the patient (Schulman, 1958).

Patients' satisfaction with the nursing care that they receive is highly dependent upon the congruency of their expectations and the actual care that is received (Risser, 1975). Patients come to the hospital carrying certain desirous outcomes of their hospital stay. Certain procedures will be very high on their list of priorities while others will seem relatively unimportant. As White (1972, p. 4) postulates, "A patient's view concerning what is important for his welfare influences his attitudes toward his care as well as the value he derives from it."

Models for Quality Nursing Care

All three subpopulations of patients, nurses, and physicians hold valued expectations of nursing care. These attributes must be ascertained. Congruencies and differences can thus be explored.

A search of the literature was done to delineate which attributes of nursing care were important to each of the three subpopulations being studied. It was found that research in this particular area was minimal.
The American Nurses' Association (1965, p. 107) broadly classifies nursing roles into "cure," "care," and "coordinate." Various authors have agreed with this trinomial taxonomy (Baziak, 1968; Guinee, 1970). Eight characteristics of nursing care have been suggested to be highly valued by patients, nurses, and/or physicians. These eight attributes are: competency in technical skills, personalized care, information source, leadership abilities, cooperation with other personnel, professional education, professional creativity, and professional demeanor.

The cure aspect of professional nursing functions incorporates the promotion of health and healing. It is the diagnosing, treating, and restoring to health. Competency in performing technical tasks is a function of this curing role.

The care aspect of the nursing practice is providing "comfort and support in times of anxiety, loneliness, and helplessness. It is listening, evaluating, and intervening appropriately" (American Nurses' Association, 1965, p. 107). The attributes of personalized care and information source are assigned to this category.

The definition of the coordination aspect of nursing functions involves "coordinating and synchronizing medical and other professional and technical services as these affect patients" (American Nurses Association, 1965, p. 107). The two characteristics, cooperation with other personnel and leadership abilities, have been ascribed to this category.

It is questionable as to the other three attributes categorical placement in this cure, care, coordinate taxonomy. Therefore, professional education, professional creativity, and professional demeanor are
classified as unique entities and are collectively grouped in an "other" category.

Each group, patients, nurses, and physicians, values certain nursing functions more highly than others. From the review of the literature, three models are designed to figuratively illustrate and predict which attributes of quality nursing care are important to the three sub-populations. The similarities and differences in these models' characteristics are then demarcated.

**Patients.** Figure 1 was devised as a diagramatic summary of the literature's review of patients' preferences of nursing attributes. The most frequently chosen characteristics were: competency in technical skills, personalized care, professional demeanor, and being an information source. Competency in technical skills remained the top priority, while psychological interventions were secondary (White, 1972; Holliday, 1961; Lesser and Keane, 1956; Safford and Schlotfeldt, 1960; Legan, 1965b). These findings agreed with Maslow's (1970) hypothesis that physiological needs, as well as feelings of safety and security must be assured before a person progresses to the higher needs of belonging, esteem, and self-actualization.

Personalized care was suggested to be important to patients. Studies indicated that patients placed high emphasis upon the nurses' qualities of empathy, tender touch, and ability to attend to the psychosocial components of the patients' illnesses. Tagliacozza (1965) discovered that eighty-one percent of her studied patient population stressed personalized care. Safford and Schlotfeldt (1960) found that emotional care was ranked second to physical care among the patients. In
Figure 1. Patients' Perceptions of Valued Attributes of Quality Nursing Care.
the study completed by Holliday (1961), great emphasis was placed upon
the nurses willingness to spend time with the patients, listening and
understanding their fears and concerns. Support and friendliness were
also ranked highly in this study.

Patients have a strong desire for knowledge. Information con­
cerning their individual disease entity, procedures which are being done,
progress that they are making, and their possible life styles after dis­
charge are just a few issues about which patients desire additional in­
formation from nurses. Nurses are considered an information source,
someone to turn to for answers, someone to interpret certain nonunder­
stood explanations, a resource who will help prepare patients for what
the future will bring while in the hospital and after discharge. Teach­
ing is considered an important attribute of nursing in the/patients' percep­
tions (Holliday, 1961; Tagliacozza, 1965; Legan, 1965b; Skipper and

Holliday's (1961) study suggest that the nurses' professional
mannerisms are important to patients. She found that female patients
ranked neat appearance fifth on a fifteen variable scale of valued nursing
characteristics. Male patients did not give this attribute such high
priority, ranking it fifteenth. Tagliacozza (1965) indicated from her
study that patients expect nurses to be dedicated to their profession and
to the patients. Eighty-one percent of the patients studied emphasized
nurses' professional and personality traits as being important in nursing
care.

Nurses. Figure 2 has been devised to diagramatically illustrate
the characteristics of nursing care that nurses themselves value highly
Figure 2. Nurses' Perceptions of Valued Attributes of Quality Nursing Care.
in previously documented studies. The eight attributes which positively influence nurses' perceptions of quality nursing care are: competency in technical skills, personalized care, information source, leadership abilities, cooperation with other personnel, professional creativity, professional education, and professional demeanor.

The review of the literature strongly suggested that nurses valued competent task performance in meeting the physical needs of the patients. In a documented study directed by Legan (1965a) it was found that the majority of the 130 nurses in the study stressed physical care and observations as prime nursing functions. White (1972), Holliday (1961), Safford and Schlotfeldt (1960), Skipper and Leonard (1965), and Lesser and Keane (1956) also found high preference placed upon technical skills. Abdellah (1964) postulated that the nursing role included twenty-one major problems, ten of which were concerned with physical maintenance of patients.

Personalized care is a broad function encompassing warmth, comfort, sensitiveness, and individualized care. It is looking at the total patient and attending to the psychosocial needs. Encouraging the patient to verbalize their feelings and being able to truly empathize with the patient are other components of this attribute.

Several studies showed that nurses strongly valued personalized care (White, 1972; Holliday, 1961; Smith and Metzner, 1970; Spalding and Notter, 1970; Schlotfeldt, 1965). White's (1972) study revealed that of the twelve valued characteristics of nursing care chosen by the nurses themselves, seven fell into the care classification. White (1972) along with Smith (1964) questioned this highly valued attribute. They contended
that psychosocial needs of patients will be met by ensuring that the "needed physical care is administered readily and cheerfully and that patient's anxiety is reduced to a minimum by keeping him properly informed" (White, 1972, p. 12). This implied that some nurses believed that by giving competent, physical care and adequate information to patients, the psychosocial needs would also be fulfilled.

In any health/illness setting there is a vast array of information that must be shared with patients. Laboratory tests, procedures, altered life styles and so forth need explanations and/or clarification. Keeping the patients well informed while concurrently initiating teaching plans is suggested to be highly valued in the nurses' perceptions of their essential role aspects (White, 1972; Baziak, 1968; Holliday, 1961). Legan (1965a) has directed a study in which the nurse respondents to an 88 item questionnaire have placed high emphasis on the patient teaching functions, especially those regarding medications and treatments.

Patients undergo many different examinations and procedures while hospitalized. They enlist the services of various departments, such as physical therapy, radiology, pharmacy, and dietetics. Coordination of all the procedures and treatments is considered a nursing leadership responsibility (Legan, 1965a; King, 1962).

The nursing needs of all patients cannot be met solely by professional nurses. Technicians and ancillary personnel are employed under the guidance and supervision of professional nurses (American Nurses' Association, 1965). This supervising role enlists nurses' leadership abilities in maintaining systemized communication and coordination among
patients, nursing personnel, and other members of the health team (Smith, 1964; Schlotfeldt, 1965; Baziak, 1968; King, 1962).

A review of the literature indicated that nurses considered the maintenance of interpersonal and interprofessional relationships to be one of their functions (Abdellah, 1964; Baziak, 1968; Smith, 1964; Smith and Metzner, 1970; Spalding and Notter, 1970; King, 1962). Though willingness to help others was devalued by nursing colleagues in the Hinshaw and Field study (1974), Holliday's research (1961) showed that nurses ranked being "cooperative" seventh on a fifteen variable scale.

Hinshaw and Field (1974, p. 298) defined professional creativity as "the ability to produce innovative and effective solutions to nursing problems." They discovered that nurses emphasized ingenuity and creativity in rendering quality nursing care. In their study, a high correlation was obtained between professional creativity and quality nursing care ($r = .964$, $p < .10$).

Educational preparation in the behavioral and natural sciences has been noted by nurses as being essential for understanding the total patient and for assuring technical competence. A broad knowledge base is seen as a necessary requisite for assessment, formulation of nursing diagnoses and care plans, interventions, and evaluation (King, 1962). King (1962, p. 247) states, "Many nurses perceive each other as having levels of technical competence that are related to their educational background." Schlotfeldt (1965) contends that high levels of education are essential for preparing professional nurses. The application of scientific knowledge and judgment is a necessary requisite of the problem solving process. Hinshaw and Field (1974) note that nurses' perceptions
of their colleagues quality of nursing care is strongly correlated with the quality of their colleagues' professional education \((r = .917, p < .10)\).

Each profession has conventional norms and rules of etiquette that are expected of its members (Thompson et al., 1975). The profession of nursing has evolved its own standards of professional demeanor for all nurses. Mannerisms, appearance, and behaviors are expected to be conducted according to these professional nursing standards.

The influence that professional demeanor has on perceptions of quality of nursing care is questionable. Holliday (1961) has found that nurses ranked being well-dressed fourteenth on a fifteen variable scale of nursing attributes. However, Hinshaw and Field (1974) have shown that nurses' perceptions of their colleagues' quality of nursing care is highly correlated with their perceptions of their colleagues' professional demeanor \((r = .893, p < .10)\).

**Physicians.** Figure 3 outlines physicians perceptions of the important attributes of quality nursing care. Very little research and documentation has been done in this area. Competency in technical skills, professional education, and leadership abilities have been shown to positively influence physicians' perceptions of nursing care.

The physician-nurse relationship has been culturally passed down through the ages. Traditionally, the physician has assumed an independent role, while the nurse has occupied a relatively dependent position. Connelly et al. (1966), Bates (1970) and Hughes et al. (1958) have indicated that physicians have a need to feel in complete control, and ultimately responsible for their patients. Any transfer of function or
Figure 3. Physicians' Perceptions of Valued Attributes of Quality Nursing Care.
decision-making to nurses is suggested by these authors to possibly threaten physicians' authority. O'Dell (1974) has found in his study that physicians have responded negatively to nursing attributes which involve judgment and evaluation.

Physicians depend upon nurses to deliver basic, competent care to patients. Smith and Metzner (1970), Connelly et al. (1966), Bates (1970), and Pratt (1965) document the strong emphasis that physicians place upon nurses' abilities to perform technical tasks. Physicians expect nurses to support them in the management and care of the patients.

The Committee on Nursing, A.M.A. (1970) has taken a stand on supporting all levels of nursing education. The acquisition of higher levels of education has become a requisite of quality nursing care in the perspectives of the physicians (Connelly et al., 1966; Committee on Nursing, A.M.A., 1970; Pratt, 1965; Schlotfeldt, 1965; Smith and Metzner, 1970).

Comparison of Attributes Across Three Subpopulations

A review of the literature indicated that all three groups, patients, nurses, and physicians, valued competency in technical tasks as a basic requisite of quality nursing care. The value placed upon the other nursing attributes varied among the three subpopulations.

White's (1972) research suggested that nurses placed more emphasis upon psychosocial needs than did the patients. Patients had higher preference for competent technical skills than did nurses. Holliday's (1961) study indicated that nurses stressed instructive abilities and levels of
education as important attributes of quality nursing care much more highly than patients.

Smith and Metzner (1970) discovered that physicians and nurses varied in their perceptions of the importance of various nursing functions. It was found that nurses placed higher emphasis upon personalized care, cooperation, and maintaining patient-relationship attributes. Conversely, physicians tended to place much greater emphasis upon technical skills and competency.

It is speculated that nurses, as well as patients, will stress personalized care more than physicians. Physicians will expect nurses to demonstrate leadership abilities and a broad knowledge base. Although these attributes will be important to nurses, professional creativity and being an information source will be more highly valued by nurses as necessary components in rendering quality nursing care.

**Definition of Terms**

For the purposes of this study, the following terms are defined:

1. Perceived characteristics of quality nursing care — those attributes which are valued as being basic and important in rendering good nursing care.

2. Quality nursing care — the degree of excellence that is rendered in the actual service or care given to patients. It encompasses all aspects of the multifunctional nursing role.

3. Personalized care — focuses on the individual patient's psychosocial needs. It involves supportive, emotional, and empathetic nursing
care. Warmth, friendliness, and sensitivity are requisites of this term.

4. Competency in technical skills — adequate and adept performance of physical procedures.

5. Cooperation with other personnel — working in collaboration with other health team members toward a common goal. It includes willingness to lend assistance when needed.

6. Information source — uses professional abilities in offering explanations to patients concerning their disease process, progress, procedures, occurrences, and is available and willing to answer questions.

7. Professional demeanor — adherence to the norms and standards of conduct, appearance, and mannerisms established by the profession.

8. Leadership abilities — the ability to direct, coordinate, and supervise other personnel, procedures, and activities.

9. Professional education — the quantity and quality of basic educational preparation in the behavioral, natural, and applied sciences through formal instructions, and clinical experiences.

10. Professional creativity — use of professional knowledge and imagination in seeking innovative and effective solutions to nursing problems.

11. Personal liking — the degree to which one finds favor or attraction to another person.

12. Personal knowledge — the degree to which one knows another individual's basic characteristics, personality, and unique attributes.
Hypothesis

Perceptions of nursing attributes which make up quality nursing care vary among patients, nurses, and physicians. Three models delineating the attributes that are suggested to be valued by each group will be tested.

Assumption

The relationship of quality nursing care to its independent variables is based upon a multivariate form of the psychophysical law developed by Stevens (1957). It has been demonstrated that a sensory response elicited from the application of a physical stimulus will increase as a power function of the magnitude of that stimulus (Stevens, 1957). The psychological response magnitude $\psi$ as related to the physical stimulus magnitude $\phi$ can be shown in the equation, $\psi = k\phi^n$, "n" being the power exponent, "k" representing a constant which can be empirically estimated (Stevens, 1957).

Substantiation of the power function governing the increment of the subjective sensation to social stimuli was revealed in the work of Hamblin et al. (1963) and Hamblin and Smith (1966). In the latter study, measuring the effect of multiple attributes ($S$) on the attainment of professional status ($R$) expanded the original bivariate stimulus-response relationship to incorporate the power magnitude effect of many variables. This multivariate formula, $R = c S_1^n \cdot S_2^n \cdot \ldots \cdot S_k^n$ was developed with further substantiation in Hamblin's study (1974).

The perception of important attributes determining quality nursing care requires employment of subjective valuing. Prior conditioning
and/or familiarity with a social stimulus will influence the magnitude of the subjective response. Educational, familial, cultural, and social norms instill into our conceptual beliefs the "proper" and acceptable forms of behavior. This learning process suggests that all attitudes are nonvoluntary responses controlled by conditional stimuli (Hamblin and Smith, 1966).

In this study it is assumed that the subpopulation groups will perceive certain independent characteristics as indicators of quality nursing care. The predicted independent characteristics will cause a level of response in the perceived quality nursing care based on prior conditioning experiences. This premise indicates that the independent characteristics are related to the quality nursing care by a power function.

It is assumed that the subjective value assigned to the quality nursing care (QNC) will be related by a power function to the magnitude of the independent attributes: competency in technical skills (CTS), professional creativity (PC), information source (IS), personalized care (PrC), cooperation with other personnel (COP), professional demeanor (PD), leadership abilities (LA), and professional education (PE).

That is:

\[ QNC = c \cdot CTS^a \cdot PC^b \cdot IS^c \cdot PrC^d \cdot COP^e \cdot PD^f \cdot LA^g \cdot PE^h \]

The perceptual value placed upon each of these characteristics will be a nonvoluntary response determined by prior familiarity, socialization, and conditioning.
CHAPTER 2

THE DESIGN

A mathematical correlational design was utilized in this study to determine those attributes perceived by patients, nurses, and physicians as basic to quality nursing care. The basic guidelines follow the methodology employed by Hinshaw and Field (1974). This methodology incorporates certain principles established by Hamblin (1974) for this type of design: (a) ratio measurement of all variables under study, and (b) control by constancy. To obtain ratio level scales, magnitude estimation techniques were utilized. Control by constancy was assured by having all subjects respond to all the variables.

The Setting

This research study took place at a major university hospital. The intensive care labor and delivery suite was used for the collection of data. This unit was selected because of the close working relationships between the patients, nurses, and physicians.

The Study Population

Three separate subpopulations were chosen for this study to explore the valued attributes of quality nursing care. Ten patients, ten registered nurses, and ten physicians from the intensive care labor and delivery suite were utilized. Several requirements were established to ensure that all subjects would have the knowledge and ability to rate the
nurses. The nurses were required to have been employed in the labor and delivery unit of this university hospital for a minimum of thirty days. The physician subpopulation included interns, residents, and one attending physician who had worked in the labor and delivery intensive care unit for a minimum of twenty days. The patients were limited to English speaking women who had spent three or more days and nights in the labor and delivery unit. Any patients who had received magnesium sulfate medication during their delivery were required to have been discontinued from this medication for a minimum of twenty-four hours prior to the first interview. At the time of the interviews, all the patients were on the maternity unit. Written permission for all interviews was obtained from the individual participants of the three subpopulations along with verbal permission from the nursing service department and the obstetrical staff coordinator. Permission to undertake this study was also obtained from the Human Subjects' Committee (see Appendix A).

Because of the varied times that deliveries occur, it was assumed that the physicians had had sufficient experience with the nurses on this unit for all three shifts to be able to make the judgments required of them. The close working proximity, reporting at the change of shifts, and the direct observance of their colleagues' performance made it possible for the nursing staff to rate their associates. By requiring a minimum of three days and evenings in the labor and delivery suite, it was assumed that the patients would have had personal contact or observed the performance of most, if not all of the nurses in this particular setting. Photographs were utilized to identify the nurses during all interviews.
If a nurse was not recognized by her photograph, a not applicable (NA) was substituted for the judgmental rating of that particular nurse.

**Control Variables**

To estimate the degree that personal liking and personal knowledge had on the subjects' judgmental ratings, two control variables were used in this study. To test the effect that personal or nonprofessional attributes had on the subjects' ratings, the control variable, personal liking was employed. Personal knowledge was utilized as a control variable to insure that all subjects had had sufficient experience with the nurse stimuli to be able to make the value ratings required of them.

**Magnitude Estimation Procedures**

Magnitude estimation techniques were utilized in this study in order to provide ratio measurement scales. The basic premise underlying this method was that subjects were asked to estimate with a numerical qualifier the amount of sensation produced from the application of a standard stimulus (Stevens, 1957). This premise was adapted for this study design. Subjects were asked to assign a numerical value to appraise the intensity of their subjective impression produced when rating each nurses' abilities related to all of the variables. Because the nurses possessed varied levels of skills and abilities, a spread of points was obtained for each variable.

In a 35-40 minute interview, each subject was given a brief explanation of the purpose and principles of the study. Each subject was assured that their responses were confidential and would not be used to evaluate the performance of individual nurses. Each subject was informed
that the results of the study would be collectively gathered and that individual judgment ratings would not be used. Instructions were given, and, to insure adequate practical understanding of the use of proportional numbers and magnitude estimation, a training session, similar to the one used by Hinshaw and Field (1974) was employed. The format of the training period was as follows:

Let's practice for a while with the method that you will be using today in our talk. I would like you to think in terms of number proportions or ratios. To explain this a little better and to be sure that we are both thinking along the same pathways, let's do a simple practice trial, o.k.?

If I give you a number 10, what would be twice as large? (20)
one-half as large? (5)
three times as large? (30)
one-fourth as large? (2.5)

What you have just done has been to give me numbers that are in proportion to the first number — 10; that is, 20 is twice as large as 10, 5 is one-half as large and so forth.

Let's try one more practice run. This time just a little different. Now, I want you to continue to think in terms of proportions or ratios. I have drawn a series of lines of various lengths on these 3 x 5 cards. I have assigned ten units to this particular line to indicate that it is of average length. With each of the other lines that I present to you I would like you to proportionally estimate their lengths in terms of the average line, that is, if you think that the line is twice as long assign to it 20 units, if it is one-third as long assign to it 3.3 units and so forth. (Five lines were then presented to the subject. When the subject accurately completed all the lines, the interview continued.)

Do you have any questions about how you are to give your responses in this manner using proportional terms? I would like you to use this same technique in rating the nurses in the labor and delivery room according to a series of characteristics that I shall explain to you. (Adapted with permission from Hinshaw and Field, 1974.)

Operationalization of Variables

Broad definitions were designed for each of the independent, dependent, and control variables. The same definitions were given to
each subject. These definitions were created to stimulate subjective valuing processes from prior conditioning. The following operational definitions were given to each subject.

Definitions

**Quality Nursing Care.** You probably have noticed that in the labor and delivery suite, some nurses seem to give more quality of care to patients than other nurses do. Some nurses may give superior care while others give care of a lesser quality. Among the nurses in the labor and delivery room, whom would you consider provides average quality of care?

**Professional creativity.** You probably have noticed that some nurses are more imaginative and creative in giving care to patients. Some nurses try new and different ways of doing certain things seeking better, more effective solutions to problems. Among the nurses in the labor and delivery unit, whom would you consider possesses average creativity?

**Competency in technical skills.** In the labor and delivery room you probably have noticed that some nurses perform physical or technical tasks in a more superior manner, while other nurses are not quite as skillful. Some nurses are more competent in meeting the physical needs of patients. Of all the nurses in the labor and delivery room, whom would you consider has average competency in her performance of technical skills?

**Personalized care.** You probably have noticed that some nurses give more personal, individual care than others. Some nurses are more
sensitive to patients' total realm of needs, emitting warmth and friendliness to her patients. Of all the nurses in the labor and delivery suite, whom would you consider gives an average amount of personalized care?

Cooperation with other personnel. You probably have noticed that in the labor and delivery suite some nurses seem to maintain better inter-professional relationships than others. Some nurses seem to get along better with the rest of the staff and are more willing to help their colleagues. Of all the nurses in the labor and delivery unit, whom would you consider is average in cooperating and helping others?

Information source. You probably have noticed that in the labor and delivery room, some nurses are more informative than others. Some nurses seem to explain procedures, tell the patients what's happening and their progress, and answer their questions more readily than others. Of all the nurses in the labor and delivery suite, which one would you consider to be an average information source?

Professional demeanor. You probably have noticed that in the labor and delivery suite some nurses conduct themselves in a more professional manner than do other nurses. Some nurses look, dress, and behave more professionally than do other nurses. Of all the nurses in the labor and delivery unit, whom would you consider to be the average in her professional demeanor?

Leadership abilities. As you have probably noticed, some nurses are better able to direct personnel, procedures, and activities. Some nurses can coordinate the many services needed by the patients, and get procedures done efficiently and on time. These nurses seem to have the
knack for leadership, more so than other nurses. Of all the nurses in the labor and delivery suite, whom would you consider possesses average leadership abilities?

Professional education. Nurses differ in the quantity and quality of their professional education. Some types of educational preparation are better than others. Some nurses seem to have a better knowledge base from which to draw. Thinking of all the nurses in the labor and delivery room, whom would you consider has an average educational background?

Personal liking. It is normal and quite human that we like certain individuals more than we like others. Some people we just generally like more than we do others. Of all the nurses in the labor and delivery suite for whom do you have an average liking?

Personal knowledge. We all know certain people better than we know others. In terms of the amount of personal knowledge you have of the nurses in the labor and delivery unit, whom do you know about average?

Measurement Techniques

Each subject was presented pictures of the nurses with whom they had had contact in the labor and delivery suite. A standard or average nurse was selected for each variable. As each picture was presented, the subject was asked to proportionally rate the amount of the characteristic that the nurse demonstrated. Each nurse was judged on the one variable before proceeding to the next variable. Each nurse was ultimately judged according to all eleven variables. The variables, as well as the nurses' photographs were presented to each subject in a randomized fashion to control by constancy.
Instructions were given to all subjects in the like manner. The format was as follows:

"I am now going to ask you to rate the nurses in the labor and delivery suite as to how much of eleven characteristics of nursing care each nurse possesses. These particular characteristics are attributes that most nurses possess to some degree. Some nurses have more or less of certain qualities than others. For each characteristic I will ask you to think of one nurse in the labor and delivery suite who demonstrates an average amount of that characteristic. Assign to her ten units. Then, for each of the other nurses in the labor and delivery room assign them proportional units as to whether they possess more, less, or equal amounts of the characteristic as does the standard or average nurse. For example, if Nurse X is average in giving personalized care assign her ten units. Then, if Nurse Y gives twice as much personalized care as Nurse X, assign Nurse Y twenty units. If she only gives one-half as much personalized care, assign her five units, if only one-third, 3.3 units and so forth. If a nurse does not possess any of the particular attribute, assign her zero units. It is very important that I receive your very first impressions, therefore, I will proceed at a fairly rapid pace. Before we begin, do you have any questions."

For each variable the operational definition was given and the subject indicated which nurse was judged to have an average amount of the attribute. The interviewer then proceed as follows:

"O.K., if Nurse X has average professional creativity, (competency in technical skills, professional education, and so forth, each variable
in randomized succession) which is equal to ten units, how much professional creativity (each variable) would you consider Nurse Y to have?" 

Each subject therefore selected one nurse (by photograph) whom they considered average according to the variable. The subjects then ranked the other randomly presented nurses (by photographs) in proportion to the average standard. Each independent, dependent, and control variable was measured in the same manner.

Reliability and Validity

Reliability is the degree to which measuring procedures yield consistent results with repeated trials (Fox, 1970). In this study, two types of reliability tests have been utilized, one to estimate intrasubject reliability, the other to determine interrater reliability.

A test-retest technique was employed to estimate the reliability of each individual subject's responses (intrasubject reliability). Each subject was interviewed, and judgmental ratings were obtained on all the nurses in the labor and delivery suite. A second interview under equivalent conditions was to be obtained from each subject within twenty-four to seventy-two hours of the initial interview. This time separation was established so that a sufficient interval of time had elapsed for the memory bias effects of the first interview to wear off, yet, not long enough to cause a significant amount of real change in the ratings. After completion of both interviews, the results were compared and variations noted.

A second reliability test was utilized to estimate the degree to which subjects within each subpopulation yielded similar ratings of the
nurse stimuli's abilities (interrater reliability). It was theoretically assumed that subjects of each subpopulation would rate the nurse stimuli in a similar manner due to prior social, cultural, and familiar influences. Utilizing interrater reliability tests, this theoretical assumption was empirically analyzed.

Construct validity is the extent to which an instrument adequately measures the concepts that it is intended to measure (Fox, 1970). In any research study, construct validity can only be estimated. Further substantiation can be obtained only through replicating the study.

In assessing perceptions of quality nursing care, the estimation of construct validity was done by first predicting relationships between the independent and dependent variables based on a review of the literature. The second step encompassed clarifying the operational definitions evolving from the theoretical framework. Results of a study either supported or disconfirmed the theoretical relationships. If the data supported the theoretical propositions, it could be estimated that the operational definitions would be: (1) substantiating the predicted directional influence of the attribute on the dependent variable, quality nursing care, and (2) measuring the described attribute of nursing. Corroboration of a study's construct validity can be obtained only through replication. An example of the estimation of construct validity is shown in Figure 4.

**Data Analysis**

The initial step of data analysis was to standardize the data. This was accomplished in the measurement procedure when each subject
Theoretical Proposition =
Professional Creativity $\rightarrow$ Quality Nursing Care 1.
Measurement of Professional Creativity $\rightarrow$ Quality Nursing Care 2.

You probably have noticed that some nurses are more imaginative and creative in giving care to patients. Some nurses try new and different ways of doing certain things, seeking better, more effective solutions to problems.

You probably have noticed that some nurses give more quality of nursing care to patients than other nurses do. Some nurses may give superior care while others give care of a lesser quality.

Step 1. Developing a theoretical proposition from the review of the literature.

Step 2. Substantiating data for the theoretical proposition.

Step 3. Assuming that because the data supports the theoretical prediction, the operational definition is measuring that attribute which it is intended to measure.

Figure 4. Example of the Estimation of Construct Validity.
selected an average or standard nurse and assigned her ten units. The remaining judgments were given in proportional relationship to the ten unit standard assigned to the average nurse. The collected data was standardized to these units.

Two sets of data were obtained using the test-retest techniques. Three sets of significance tests were run on the data to estimate intra-subject reliability, variability in the ratings of the nurse stimuli, and interrater reliability. If the results indicated that there was intrasubject reliability, then the mean of the two sets of judgments would be used as the data. The data would then be logarithmically transformed.

Two major statistics used in this study were the Pearson correlation coefficients and multiple regression. Pearson's product moment correlation was employed to obtain the correlational value of all variables to one another. A correlational matrix was generated for each subpopulation. This allowed the researcher to estimate the extent to which several variables might be measuring the same attribute.

Two sets of multiple regression analysis were done for each subpopulation. First, all independent and control variables were regressed on the dependent variable, quality nursing care. Second, multiple regression analysis was conducted regressing only significant independent and control variables on the dependent variable. These procedures allowed the researcher to estimate the degree to which the dependent variable, quality nursing care, was explained by the other variables as predicted in the theoretical models for each subpopulation. Only regression coefficients significantly different from zero at the .05 level were accepted
for the second regression analysis. Summarized tables of multiple regression coefficients were constructed for the purpose of comparing all three subpopulations.
CHAPTER 3

PRESENTATION AND ANALYSIS OF DATA

The analysis of the data was done in three sections: (1) three sets of significance tests were employed to estimate intrasubject reliability, variability in the ratings of the nurse stimuli, and interrater reliability; (2) the information obtained was then examined for correlations among the variables with a separate correlation matrix constructed for each subpopulation; and (3) multiple regression analysis was done for each subpopulation to determine the independent variables which significantly predicted quality nursing care.

Significance Tests of Reliability and Variability

Three sets of significance tests were run on each subpopulation. First, to estimate intrasubject reliability two sets of measurements were obtained at separate times from each subject. This was done to assess the extent of variation in the scores within a subject which was due to inconsistency in measurements (test/retest technique). The two sets of measurements were obtained within twenty-four to seventy-two hours of one another for twenty-five subjects. Second interviews with two nurses and two physicians were conducted after this time interval due to unanticipated deliveries, emergencies, days off, and vacations. All interviews took place within eight days of one another. One physician was interviewed a second time before the minimum twenty-four hour time separation.
because he was leaving this hospital setting. The data indicated that the two sets of measurements were not significantly different at the \( p < .05 \) level for nine of the eleven variables. This suggested that measurement reliability did exist. Two variables were significantly different indicating that these variables were not as reliable. These variables were: competency in technical skills \( (p < .027) \) among the nurse sub-population, and professional demeanor \( (p < .05) \) among the physician group.

Second, the ratings on the nurse stimuli were tested to determine if the nurse stimuli possessed different abilities in relation to the variables being studied. The results did show significant variation among the ratings for the nurse stimuli on each of the variables.

A third significance test was utilized to check for interrater reliability. Significant differences were obtained on each variable indicating that interrater reliability was questionable. To account for variations among the raters, the data required further standardization. This was accomplished by obtaining a mean score on each variable from the two sets of measurements taken. These mean scores were then computed to the logarithm of 1.0. Data were assumed to be described by a power function and, therefore, necessitated logarithmic transformation in order to obtain linear statistics.

**Correlation Matrix for the Three Subpopulations**

The purpose of correlation analysis was to provide data which would aid in the interpretation of multiple regression analysis. The
correlations among all the variables were analyzed for each of the three groups. Correlation matrices were constructed for each subpopulation. All three subpopulations demonstrate multicollinearity or high correlation among several independent variables. Multicollinearity may lead to skewing of standardized regression coefficients (bs). If two variables are highly correlated to the dependent variable and to each other, one of the variables may be statistically determined to be non-significant. Therefore, a consequence of multicollinearity may be an inaccurate estimation of the significance and strength of a variable (Nie et al., 1975).

Patients

The patient subpopulation demonstrated that six variables were highly correlated with the dependent variable, quality nursing care. These variables were: professional education \((r = .80)\), personalized care \((r = .87)\), competency in technical skills \((r = .82)\), cooperation with other personnel \((r = .84)\), leadership abilities \((r = .80)\), and personal knowledge \((r = .83)\) (see Table 1).

The patient subpopulation demonstrated that eight independent variables had high intercorrelations with one another at the point .80 level or above. These were: personalized care, competency in technical skills, cooperation with other personnel, leadership abilities, professional education, personal knowledge, personal liking, professional creativity, and information source. Personalized care was highly correlated with: personal liking \((r = .88)\), personal knowledge \((r = .85)\), and information source \((r = .80)\). Competency in technical skill was
Table 1. Correlation Matrix for Logarithms of Independent, Dependent, and Control Variables
Patient Subpopulation, n = 95.

<table>
<thead>
<tr>
<th>Variables</th>
<th>QNC</th>
<th>PrC</th>
<th>CTS</th>
<th>COP</th>
<th>PC</th>
<th>PD</th>
<th>PE</th>
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<td>Personalized Care (PrC) (log)</td>
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<td>Competency in Technical Skills (CTS) (log)</td>
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<td>Cooperation with Other Personnel (COP) (log)</td>
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<td>Professional Creativity (PC) (log)</td>
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<td>Professional Education (PE) (log)</td>
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<td>.80</td>
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<td>.71</td>
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<tr>
<td>Leadership Abilities (LA) (log)</td>
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<td>Information Source (IS) (log)</td>
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highly correlated with leadership abilities ($r = .81$). Cooperation with other personnel received high intercorrelation with information source ($r = .82$), professional creativity ($r = .80$), and professional education ($r = .80$). Professional creativity was highly correlated with leadership abilities ($r = .88$) and information source ($r = .81$). Professional education was highly correlated with leadership abilities ($r = .80$). Personal liking received high correlation with personal knowledge ($r = .86$) and information source ($r = .82$). Personal knowledge and information source were highly intercorrelated ($r = .83$).

Nurses

The nurse subpopulation demonstrated that four variables were moderately correlated with quality nursing care. These were: information source ($r = .82$), cooperation with other personnel ($r = .80$) personal liking ($r = .78$), and professional creativity ($r = .76$) (see Table 2).

The nurse subpopulation had fewer highly intercorrelated variables than either the patient or physician subpopulations. Five independent variables were correlated with one another at the $r = .80$ level or above. These attributes were personalized care, information source, personal liking, professional creativity, and cooperation with other personnel. Personalized care received high correlation values with information source ($r = .85$), personal liking ($r = .84$), professional creativity ($r = .82$), and cooperation with other personnel ($r = .81$). Competency in technical skills was highly correlated with leadership abilities ($r = .80$). Cooperation with other personnel was found to be highly correlated with
Table 2. Correlation Matrix for Logarithms of Independent, Dependent, and Control Variables Nurse Subpopulation, n = 108.

<table>
<thead>
<tr>
<th>Variables</th>
<th>QNC</th>
<th>PrC</th>
<th>CTS</th>
<th>COP</th>
<th>PC</th>
<th>PD</th>
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<td>Competency in Technical Skills (CTS) (log)</td>
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<td>Cooperation with Other Personnel (COP) (log)</td>
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<td>Personal Knowledge (PK) (log)</td>
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<td>Leadership Abilities (LA) (log)</td>
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<td>Information Source (IS) (log)</td>
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<td>.84</td>
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<td>.51</td>
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personal liking ($r = .89$), information source ($r = .84$), and professional creativity ($r = .80$). Professional creativity was highly correlated with information source ($r = .91$). Personal liking and information source were highly correlated ($r = .83$).

Physicians

The physicians' perceptions of quality nursing care were highly correlated with professional creativity ($r = .91$), competency in technical skills ($r = .91$), information source ($r = .90$), professional education ($r = .89$), personalized care ($r = .85$), and leadership abilities ($r = .83$) (see Table 3).

The physician subpopulation demonstrated that five independent variables were highly correlated with one another. These were competency in technical skills, information source, leadership abilities, professional education, and professional creativity. Competency in technical skills was highly correlated with professional education ($r = .92$), leadership abilities ($r = .91$), information source ($r = .88$), and professional creativity ($r = .88$). Professional creativity was highly correlated with information source ($r = .90$), professional education ($r = .88$), and leadership abilities ($r = .82$). Professional education received high correlation values with leadership abilities ($r = .88$) and information source ($r = .88$). Leadership abilities and information source were highly correlated ($r = .85$).

Regression Systems Within the Three Subpopulations

To estimate which variables significantly influenced quality nursing care, multiple regression analysis was done for each subpopulation.
Table 3. Correlation Matrix for Logarithms of Independent, Dependent, and Control Variables
Physician Subpopulation, n = 109.

<table>
<thead>
<tr>
<th>Variables</th>
<th>QNC</th>
<th>PrC</th>
<th>CTS</th>
<th>COP</th>
<th>PC</th>
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<tbody>
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<tr>
<td>Competency in Technical Skills (CTS) (log)</td>
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<td>.75</td>
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<tr>
<td>Cooperation with Other Personnel (COP) (log)</td>
<td>.76</td>
<td>.75</td>
<td>.73</td>
<td></td>
<td></td>
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<tr>
<td>Professional Creativity (PC) (log)</td>
<td>.91</td>
<td>.76</td>
<td>.88</td>
<td>.75</td>
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<tr>
<td>Professional Demeanor (PD) (log)</td>
<td>.76</td>
<td>.73</td>
<td>.74</td>
<td>.76</td>
<td>.76</td>
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<tr>
<td>Professional Education (PE) (log)</td>
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<td>.92</td>
<td>.71</td>
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<td>.77</td>
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<tr>
<td>Personal Liking (PL) (log)</td>
<td>.68</td>
<td>.66</td>
<td>.64</td>
<td>.58</td>
<td>.67</td>
<td>.57</td>
<td>.58</td>
<td></td>
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<tr>
<td>Personal Knowledge (PK) (log)</td>
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<td>.56</td>
<td>.62</td>
<td>.51</td>
<td>.64</td>
<td>.49</td>
<td>.59</td>
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<tr>
<td>Leadership Abilities (LA) (log)</td>
<td>.83</td>
<td>.68</td>
<td>.91</td>
<td>.71</td>
<td>.82</td>
<td>.71</td>
<td>.88</td>
<td>.57</td>
<td>.53</td>
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<tr>
<td>Information Source (IS) (log)</td>
<td>.90</td>
<td>.77</td>
<td>.88</td>
<td>.74</td>
<td>.90</td>
<td>.72</td>
<td>.88</td>
<td>.59</td>
<td>.65</td>
<td>.85</td>
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Table 4 summarizes the multiple regression coefficients (b's) for the independent variables' effect on quality nursing care. Those variables which were significant at the p < .05 level were analyzed further. The following variables were significant for the patient subpopulation: personalized care (b = .53), professional education (b = .31), and competency in technical skills (b = .21). The nurse subpopulation had five significant variables. These were information source (b = .31), personal liking (b = .30), leadership abilities (b = .20), professional demeanor (b = .17), and cooperation with other personnel (b = .14).

Three variables were significant for the physician subpopulation. These were personalized care (b = .31), competency in technical skills (b = .31), and professional creativity (b = .23).

The proportion of variability of quality nursing care which is accounted for by each subpopulation's significant variables is expressed as the explained variance, or $R^2$. When all the variables were combined in the multiple regression analysis, the $R^2$ for each subpopulation was patients $R^2 = .872$, nurses $R^2 = .806$, and physicians $R^2 = .922$ (see Table 4).

Table 5 summarizes the second multiple regression analysis. Only the significant attributes of quality nursing care as perceived by each subpopulation are recorded.

Patients

The results suggested that personalized care (b = .54), had a strong effect on the patients' perceptions of quality nursing care. Professional education (b = .35) and competency in technical skills (b =
Table 4. Multiple Regression Results for Logarithms of Quality Nursing Care and All the Independent Variables by Subpopulations.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Patient Subpopulation (b's) n = 95</th>
<th>Nurse Subpopulation (b's) n = 108</th>
<th>Physician Subpopulation (b's) n = 109</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personalized Care (log)</td>
<td>.53&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.10</td>
<td>.31&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>Professional Education (log)</td>
<td>.31&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.05</td>
<td>.07</td>
</tr>
<tr>
<td>Competency in Technical Skills (log)</td>
<td>.21&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.07</td>
<td>.31&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Cooperation with Other Personnel (log)</td>
<td>.12</td>
<td>.14&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.08</td>
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<tr>
<td>Leadership Abilities (log)</td>
<td>.05</td>
<td>.20&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.09</td>
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<tr>
<td>Personal Liking (log)</td>
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<td>.30&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.04</td>
</tr>
<tr>
<td>Personal Knowledge (log)</td>
<td>.07</td>
<td>-.11</td>
<td>-.02</td>
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<tr>
<td>Professional Demeanor (log)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.07</td>
<td>.17</td>
<td>-.02</td>
</tr>
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<td>Professional Creativity (log)</td>
<td></td>
<td>-.02</td>
<td>.23&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>Information Source (log)</td>
<td></td>
<td>.31&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.13</td>
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<tr>
<td>R&lt;sup&gt;2&lt;/sup&gt;</td>
<td>.872</td>
<td>.806</td>
<td>.922</td>
</tr>
</tbody>
</table>

<sup>a</sup> Significant at p < .05.
Table 5. Multiple Regression Results for Logarithms of Quality Nursing Care and Significant Independent Variables by Subpopulations.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Patient Subpopulation (b's) n = 95</th>
<th>Nurse Subpopulation (b's) n = 108</th>
<th>Physician Subpopulation (b's) n = 109</th>
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</thead>
<tbody>
<tr>
<td>Personalized Care (log)</td>
<td>.54&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td>.36&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Professional Education (log)</td>
<td>.35&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competency in Technical Skills (log)</td>
<td>.25&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td>.31&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>Cooperation with Other Personnel (log)</td>
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<td>Leadership Abilities (log)</td>
<td>.19&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>Personal Liking (log)</td>
<td>.18&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>Personal Knowledge (log)</td>
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<tr>
<td>Professional Demeanor (log)</td>
<td></td>
<td>.18&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
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<td>Professional Creativity (log)</td>
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<td></td>
<td>.31&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>Information Source (log)</td>
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<td></td>
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<tr>
<td>R&lt;sup&gt;2&lt;/sup&gt;</td>
<td>.866</td>
<td>.794</td>
<td>.918</td>
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</tbody>
</table>

a. Significant at p < .05.
.25) had a moderate influence on the dependent variable, quality nursing care. These five variables accounted for a combined explained variance of $R^2 = .866$.

Nurses

Multiple regression analysis indicated that information source ($b = .25$) had a moderate effect on nurses' perceptions of quality nursing care. Cooperation with other personnel ($b = .20$), leadership abilities ($b = .19$), professional demeanor ($b = .18$) and personal liking ($b = .18$) had weak effects on the dependent variable, quality nursing care. These five variables accounted for a combined explained variance of $R^2 = .794$.

Physicians

The data from the physician subpopulation indicated that three variables significantly effected physicians' perceptions of quality nursing care. These moderate effects were personalized care ($b = .36$), competency in technical skills ($b = .31$), and professional creativity ($b = .31$). These three variables had a combined explained variance of $R^2 = .918$.

Control Variables

The two control variables used in this study, personal liking and personal knowledge, were not found to significantly influence perceptions of quality nursing care for the patient or physician subpopulations. In the nurse subpopulation personal liking was found to have a weak effect on nurses' perceptions of quality nursing care ($b = .18$).
Personal knowledge had no significant effect on the dependent variable, quality nursing care, for the nurse subpopulation.
CHAPTER 4

DISCUSSION OF FINDINGS AND LIMITATIONS

The results of this study will be discussed in a two-part sequence: (1) interpretation of findings and relationship to the predicted theoretical model, and (2) comparative analysis of the similarities and differences among the three subpopulations' results.

Interpretation of Each Subpopulations' Findings and Relationship to the Theoretical Models

Patients

Theoretically, it was predicted that four variables were valued among the patients as being important characteristics of quality nursing care. These were personalized care, competency in technical skills, professional demeanor, and information source. In this study two predicted variables, personalized care and competency in technical skills, were found to have a significant effect on the patients' perceptions of quality nursing care (see Figure 5). The two variables, professional demeanor, and information source were not found to have a significant effect. One unpredicted variable, professional education, was found to significantly influence patients' perceptions of quality nursing care.

The study results indicate that patients value personalized care in the performance of the nurses' "caring" role. The strong predictive effect that personalized care has on quality nursing care ($b = .54$) indicates that patients strongly desire the warmth, friendliness, and
EMPIRICAL MODEL

Care ——— Personalized Care (PrC)
Cure ——— Competency in Technical Skills (CTS)
Other ——— Professional Education (PE)

R² = .866

QNC = c PrC•54 • CTS•25 • PE•35 • e

THEORETICAL MODEL

Care ——— Personalized Care (PrC)
—— Information Source (IS)
Cure ——— Competency in Technical Skills (CTS)
Other ——— Professional Demeanor (PD)

Figure 5. Patients' Empirical Model vs. Predicted Theoretical Model of Valued Nursing Attributes.
sensitivity that this attribute encompasses. Being treated as individuals with unique needs is important to patients.

The "curing" aspect of nursing care was also highly valued among the patient subpopulation. This was demonstrated in the moderate predictive effect that competency in technical skills \( (b = .25) \) had on patients' perceptions of quality nursing care. The entire patient subpopulation consisted of high risk mothers who had required extended hospitalization and skillful treatment. In this critical situation, patients considered their physical needs to be very important. This supported Maslow's (1970) theory that physiological needs and safety must be assured before other needs emerge. Patients expected nurses to gratify their physical needs with competent task performance.

Patients placed high emphasis on the quality and quantity of the nurses' professional education. This characteristic was found to have a moderate influence on patients' perceptions of quality nursing care \( (b = .35) \). The high correlation that this variable had with competency in technical skills \( (r = .79) \) suggested that a strong knowledge base was considered important for the performance of competent, technical tasks.

Professional demeanor is defined in terms of professional conduct and appearance. In the labor and delivery suite all nurses dress in blue scrub uniforms, which could partially contribute to the insignificant predictability of professional demeanor on quality nursing care \( (b = -.07) \). Another participating factor may be the high levels of stress and anxiety that these mothers possess. Hospitalizations, new environments, and critical situations can produce fear and anxiety. During emotional states, one's perceptions are narrowed to the immediate problems
confronting the individual (Mitchell, 1973). This suggests that the patients may place higher value on the nurses' ability to meet their immediate needs of skillful individualized care. In this stage of their hospitalization, the nurses' appearance and mannerisms may be relatively unimportant, as the nonsignificant data suggest.

Being an information source is a "caring" component of the nursing role. It requires individualized explanations and answers to questions. Though this variable does not significantly influence patients' perceptions of quality nursing care as theoretically predicted, it does highly correlate with the other "caring" variable, personalized care \((r = .80)\). In a multicollinearity situation, if two dependent variables are highly correlated with one another, one may negate the other's significant effect on the dependent variable. This high correlation also suggests that patients may have considered being informative as an aspect of rendering personal, individualized care.

**Nurses**

Eight variables were theoretically predicted to significantly influence nurses' perceptions of quality nursing care. These were competency in technical skills, personalized care, professional creativity, information source, leadership abilities, professional education, cooperation with other personnel, and professional demeanor. Four of these variables, information source, leadership abilities, cooperation with other personnel, and professional demeanor were empirically found to influence the dependent variable, quality nursing care (see Figure 6). The unpredicted control variable, personal liking was also found to have a
Figure 6. Nurses' Empirical Model vs. Predicted Theoretical Model of Valued Nursing Attributes.
weak effect on the dependent variable. Four theoretically predicted variables, competency in technical skills, personalized care, professional creativity, and professional education were found to be nonsignificant in the empirical model.

The results from this study indicate that nurses place high emphasis on the "coordination" abilities as attributes of quality nursing care. Both leadership abilities ($b = .19$) and cooperation with other personnel ($b = .20$) weakly influence the nurses' ratings of quality nursing care as theoretically predicted. Critical care settings require efficient leadership and coordination of services. The entire health team must function collaboratively as a unit and be willing to help their colleagues (Hudak, Gallo and Lohr, 1973). Safford and Schlotfeldt (1960) contend that nursing responsibilities do encompass administrative tasks.

The "caring" variable which weakly influenced the nurses' perceptions of quality nursing care as theoretically predicted was information source ($b = .25$). During labor and delivery, many instructions must be given to patients concerning their progress, various procedures, and so forth. The results of this study substantiated Holliday's (1961) findings in which nurses ranked being instructive fifth on a fifteen variable scale of valued characteristics of nursing care.

The results of this study supports the theoretical prediction of the perceived importance of professional demeanor on the dependent variable quality nursing care ($b = .18$). Each profession has developed conventional norms and rules of etiquette concerning appearance and mannerisms. Specific professional behavior and appearance are expected from
each member (Thompson et al., 1975). This study indicates that nurses value professional demeanor and consider it to be an important attribute of quality nursing care.

The control variable, personal liking, correlates with many of the other attributes of quality nursing care. This variable did have a weak effect (b = .18) on predicting quality nursing care. The high correlation that personal liking and cooperation with other personnel had with one another (r = .89), and with the dependent variable, quality nursing care, suggested that people who were cooperative and willing to help were better liked than those who failed to maintain good inter-professional relationships.

The review of the literature suggested that nurses strongly emphasized the competent performance of physical tasks to be an important characteristic of quality nursing care. The empirical results of this study did not support this theoretical prediction. Two possible reasons may have accounted for this insignificant rating. First, in retrospect, the operational definition of this variable consisted of two components. The definition encompassed both the nurses' performance of physical tasks as well as their ability to meet all the patients' physical needs. This latter clause might suggest the inclusion of assessment and judgment as well as performance abilities. This unclear definition may have stimulated varied interpretations and thus effected its ratings.

A second possible cause for the nonsignificant value placed upon competency in technical skills might be related to the correlation found between this variable and leadership abilities (r = .80). Being able to direct others was perceived to require knowledge, competent skills
performance, and respect. Good leaders were expected to be highly skillful in their performance of technical tasks. Perfection of technical skills might be one requisite for climbing the ladder of nursing leadership. This study did indicate that leadership abilities significantly effected quality nursing care. Therefore, though competency in technical skills did not directly influence perceptions of quality nursing care, the extent of its influence on nurses' leadership abilities might be the indirect link for effecting quality nursing care.

Though personalized care did not influence nurses' perceptions of quality nursing care as theoretically predicted, there was a high correlation between rendering personal, individualized care and the other "caring" attribute, information source \((r = .85)\). The hazard of multicollinearity might reduce one independent variable's effect on the dependent variable in favor of the other highly intercorrelated variable. Though personalized care and quality nursing care were not highly correlated with one another \((r = .69)\), both shared a high correlation with similar variables: information source, professional creativity, cooperation with other personnel, and personal liking (see Table 2). This similar multicollinearity suggested that nurses did consider personalized care to be important in rendering quality nursing care.

The results of this study contradicts the theoretically predicted significant influence of professional creativity on nurses' perceptions of quality nursing care. However, professional creativity is found to have a strong correlational relationship with information source \((r = .91)\). Nurses who are imaginative and creative may be better able to give innovative explanations to patients. In this medical center, patients come
from various cultures and geographical locations. Many frequently are unable to speak English. Nurses must use their creative resources to overcome these barriers. As the results of this study indicate, being an information source significantly influences quality nursing care. This suggests that by utilizing professional creativity in keeping patients well informed, the quality of nursing care will be positively effected.

Many nurse subjects inquired about the exact definition of the variable professional education. To many, knowledge base included professional experience, while others considered it to be the quality and quantity of their basic education. Differences in interpretation of the operational definition may have greatly influenced the nurse subjects' ratings on this variable, accounting for its nonsignificant effect on predicting quality nursing care.

Physicians

Three variables were theoretically predicted to significantly influence physicians' perceptions of quality nursing care. These were leadership abilities, competency in technical skills, and professional education. The empirical results indicated that one predicted variable, competency in technical skills, had a significant effect on the dependent variable, quality nursing care (b = .31) (see Figure 7). Leadership abilities and professional education were found to have a nonsignificant effect. Two attributes which were not theoretically predicted demonstrated a moderate influence on quality nursing care. These were personalized care (b = .36) and professional creativity (b = .31).
**EMPIRICAL MODEL**

- Cure
  - Competency in Technical Skills (CTS) $\cdot 0.31$
- Care
  - Personalized Care (PrC) $\cdot 0.36$
- Other
  - Professional Creativity (PC) $\cdot 0.31$

$R^2 = 0.918$

$$QNC = c \cdot CTS \cdot 0.31 \cdot PrC \cdot 0.36 \cdot PC \cdot 0.31 \cdot e$$

**THEORETICAL MODEL**

- Cure
  - Competency in Technical Skills (CTS)
- Coordinate
  - Leadership Abilities (LA)
- Other
  - Professional Education (PE)

Figure 7. Physicians' Empirical Model vs. Predicted Theoretical Model of Valued Nursing Attributes.
The theoretical framework and review of the literature suggested that physicians valued the "curing" aspect of nursing care. This study's results substantiated these predictions. Physicians depended upon nurses to perform many technical tasks in a competent and skillful manner. Many physical procedures were done by the nurses in the care of patients.

Though the theoretical model did not recognize personalized care as a valued attribute of quality nursing care among the physicians, this "caring" component of nursing was found to significantly influence physicians' perceptions of quality nursing care ($b = .36$). This suggested that physicians depended upon nurses' warmth and sensitivity in rendering personalized care to patients.

According to O'Dell (1974) physicians responded negatively to the nursing attributes which involved professional judgment and evaluation. The results of this study disagreed with this statement. The moderate predictive power that professional creativity ($b = .31$) had on quality nursing care suggested that physicians relied upon nurses' creativity and innovation in seeking better and more effective solutions to problems.

Professional education did not have a significant effect on quality nursing care as theoretically predicted. However, this variable did show high correlation with professional creativity ($r = .88$). This suggested that professional creativity necessitated having a strong knowledge base. Being able to solve problems and devise solutions required adequate knowledge in the basic sciences, nursing and medicine. Professional education was also found to be highly correlated with competency in technical skills ($r = .92$) and quality nursing care ($r = .89$). This suggested that physicians considered professional education to be an
important correlate for the competent performance of technical tasks and for professional creativity.

The characteristic, leadership abilities, was theoretically predicted as being a valued characteristic of quality nursing care. Though the empirical results indicated a nonsignificant b value (b = -0.09) for this variable on quality nursing care, high correlation was obtained between leadership abilities and competency in technical skills (r = .91), professional education (r = .88), quality nursing care (r = .83), and professional creativity (r = .82). This implied that the possession of leadership abilities required a strong knowledge base, creative problem solving capabilities, and competency in the performance of physical tasks.

**Comparative Analysis**

This section will discuss similarities and differences among patients', nurses', and physicians' valued attributes of quality nursing care. Group comparison will be done in respect to the trinomial classification of the nursing aspects, "cure," "care," and "coordinate."

**Cure**

The patients and physicians share similar values of the importance of the competent performance of technical tasks by the nurses. Both sub-populations demonstrate moderate effects of this characteristic on their perceptions of quality nursing care. The nurse subpopulation does not recognize this attribute as being a significant predictor of quality nursing care. This may be explained either by the misinterpreted operational definition or the high correlation that is obtained with another significant variable of quality nursing care, leadership abilities.
The "caring" role is viewed from different perspectives among the three subpopulations. Patients and physicians indicate that personalized care is an important characteristic of quality nursing care. The nursing subpopulation does not support this significant value, but rather chooses information source as being a valued "caring" attribute for rendering quality nursing care. This may be explained by the high risk setting in which this study took place. The hectic pace, the critical care that is required, and the need of many preeclamptic patients for darkened and stimulus-free environments may shift the nurses' "caring" emphasis to keeping the patient well-informed and instructed. The patients' and physicians' high correlational relationship between information source and personalized care suggest that these two subpopulations also consider being informative an important attribute of quality nursing care.

The "coordination" role of nursing is perceived differently by the three subpopulations. Patients and physicians find the two variables included in this category, leadership abilities and cooperation with other personnel to be nonsignificant predictors of quality nursing care. The nurse subpopulation demonstrates a weak effect of both variables on quality nursing care. In an institutional setting, many rules and regulations may be enforced. A speciality high risk critical care unit requires coordination, supervision, and excellent management. The close working environment and near continuous pressure help to create an
atmosphere of comradery among the staff. Both leadership and cooperation are essential.

Today's basic professional nursing education prepares nurses for both leadership and coordination responsibilities. A major emphasis of baccalaureate education is preparation for assuming leadership positions. However, this researcher questions whether this strong emphasis on the "coordination" aspect of nursing care has lessened nurses' attention to the other important aspects of their role, that is, the "curing" and "caring" component.

The physician subpopulation suggest that they value nurses' leadership abilities by its high correlational results with the other valued attributes of professional creativity, competency in technical skills, and professional education. The patients' own nonsignificant value that is assigned to the "coordination" aspect suggest that their own comfort and well being are of much greater importance. In this critical period, competency and personalized care may be considered of primary importance.

Other

Three variables which were not included in the cure, care, coordinate paradigm were found to be significant attributes of quality nursing care for one of the three subpopulations. These were patients, professional education ($b = .35$), nurses, professional demeanor ($b = .18$) and physicians, professional creativity ($b = .31$).

Professional education is found to be an important attribute of quality nursing care in the perceptions of the patient subpopulation.
Neither the physician or nurse group indicate significance of this variable on quality nursing care. This indicates that patients expect nurses to possess high standards of professional knowledge. The quantity and quality of the nurses' education has an important effect on their quality of nursing care.

Though physicians do not show a significant predictive effect of professional education on quality nursing care, their high correlation with two other significant variables, professional creativity ($r = .81$) and competency in technical skills ($r = .92$), suggests that physicians also share this important value placed upon professional education.

Nurses do not consider professional education to be a significant characteristic of quality nursing care. The numerous controversies concerning continuing education requirements for relicensure, the closing of many diploma programs, and the proposed New York State 1985 mandate requiring baccalaureate degrees for professional licensure may contribute to this nonsignificant rating of professional education on quality nursing care. Another contributing factor may be the nonconsensual interpretation of the operational definition.

Professional creativity is shown to be a significant attribute of quality nursing care for the physician subpopulation. However, this attribute is found to be nonsignificant between the patients and nurses. This indicates that physicians value nurses' creative problem solving abilities. Though nurses do not demonstrate a significant effect of professional creativity on quality nursing care, high correlation of this variable with the valued variable, information source, suggests that
nurses also deem professional creativity as being an important characteristic.

With the patient subpopulation, professional creativity is not an important variable for giving quality nursing care. In critical care settings, the patients may not be cognizant of the nurses' problem solving abilities. Patients directly observe the nurses' in their "curing," and "caring" roles; however, creativity and imagination in solving problems is usually not perceived by patients.

Professional demeanor is important to the nurse subpopulation but is shown to be nonsignificant among the patients and physicians. This suggests that the norms that each profession possess are important to the members of that profession, while they are relatively unimportant to nonmembers.

The physician and patient subpopulations do share the most similar perceptions of quality nursing care. Both groups value personalized care and competency in technical skills. Professional creativity is important to physicians while professional education is valued by patients. These two characteristics, professional creativity and professional education, are highly intercorrelated in the physician subpopulation ($r = .88$), and moderately correlated with one another in the patient subpopulation ($r = .75$). This suggests that both attributes are valued by patients and physicians.

The similarity in patients' and physicians' perceptions of important characteristics of quality nursing care may suggest that both groups share the same social, cultural, and familial conditioning. Unique professional socialization of perceptions of quality nursing care may not
exist for physicians. The study findings suggest that physicians share the laymen's perceptions of quality nursing care.

The findings of this study support the original hypothesis that valued nursing attributes which make up quality nursing care do vary in the perceptions of patients, nurses, and physicians. Each subpopulation does consider the "caring" role to be an essential aspect of the nurses' responsibilities. Patients and physicians expect the nurse to be competent in their "curing" role whereas nurses perceive their "coordination" abilities as being important attributes of quality nursing care.

**Construct Validity**

Construct validity is the extent to which an instrument adequately measures the concepts that it is intended to measure. In assessing patients', nurses', and physicians' perceptions of quality nursing care, construct validity is estimated by the degree to which the theoretically predicted attributes match the empirical findings.

Two of the four theoretically predicted variables were correctly predicted within the patient subpopulation. These were personalized care and competency in technical skills. Four of the eight theoretical variables predicted for the nurse subpopulation were empirically found to be valued attributes of quality nursing care. These were information source, leadership abilities, cooperation with other personnel, and professional demeanor. For the physicians, one of the three theoretical variables was correctly predicted, competency in technical skills. In total, six of the eight theoretical variables were correctly predicted suggesting that these variables were valid. Two variables, professional education and
professional creativity were never correctly predicted. Therefore, on the basis of this one study, the validity of these variables cannot be estimated. Further substantiation of the validity of these variables can only be obtained through replication of this study.

**Limitations**

This study was limited by the following factors:

1. The operational definition of competency in technical tasks contained two separate clauses which included performance of physical tasks as well as the ability to meet the patients' physical need. This may have resulted in nonconsensual interpretation of the variable's definition.

2. There was confusion as to the actual components of professional education. The operational definition explained the variable as including quantity and quality of nurses' educational background as well as professional knowledge. The latter clause emerged inquiries as to the relationship of knowledge gained through professional experience.

3. The critical care and close working relationships involved in this type of health care delivery setting might have influenced perceptions of quality nursing care.

4. The physician subpopulation consisted of nine interns and residents and one attending physician. Being in their own stages of academic and professional growth, the perceptions of the physician subpopulation studied might differ from those who might have additional socialization into the profession and additional work experience.
5. An anticipated limitation of unwillingness to evaluate colleagues was not found in this study. The researcher's subjective impression of the willingness of all three subpopulations to evaluate the nurses in the labor and delivery suite was quite positive.
Conclusions

Several conclusions may be made from the findings in this study. Patients, nurses, and physicians do vary in their perceptions of the valued attributes of quality nursing care. Patients and physicians both share the most similar perceptions of important nursing attributes, placing value on the nurses' "caring" and "curing" abilities. Nurses' perceptions differ in that their emphasis is upon "coordination" responsibilities and adherence to professional norms and rules of etiquette. Patients tend to value nurses' professional education, while physicians find nurses' professional creativity to be important in rendering quality nursing care. Keeping the patients well-informed is considered important to nurses.

The amount of personal knowledge that people have of one another does not influence their evaluation of their professional abilities. However, personal liking does influence perceptions of valued characteristics of others. Those who are cooperative and willing to help usually are better liked than those who do not maintain good interprofessional relationships.

Recommendations

On the basis of the study findings, recommendations for nursing practice and for future research are made.
Nursing Practice

1. Nurses must become aware of patients' and physicians' perceptions and expectations of quality nursing care. Nurses should direct their actions at fulfilling these expectations or altering these perceptions where they vary.

2. Though leadership abilities are essential for professional nurses, this researcher recommends that all nurses ensure that the "curing" and "caring" aspects of nursing are equally fulfilled.

Future Research

1. The researcher recommends that this study be replicated on a general medical unit to compare perceptions of critical care nursing with those of general medical nursing care.

2. It is recommended that replication of this study be done utilizing only attending physicians. It is questionable as to whether additional experience and socialization would influence physicians' perceptions of quality nursing care.

3. In further replication studies, it is recommended that all operational definitions be clear and easily understood, with only one possible interpretation.

Summary

The purpose of this study was to explore those attributes of quality nursing care which were perceived as important by patients, nurses, and physicians. The nursing role encompassed many varied attributes which were valued differently by various groups of people. By
delineating desired nursing characteristics, actions might be directed toward fulfilling these perceptions.

This study was based upon a conceptual framework of the socialization processes and expectations of three separate subpopulations, patients, nurses, and physicians. Utilizing this framework, the researcher recognized that patients, nurses, and physicians were culturally and socially conditioned into valuing certain characteristics of quality nursing care. Though the multifunctional nursing roles have yet to find consensual agreement as to their necessary components, the American Nurses' Association's classification of "cure," "care," and "coordinate" was utilized in this study. Several sources from the literature suggested eight attributes of this trinomial classification system.

A mathematical, correlational, descriptive design was employed to test the theoretically predicted attributes of quality nursing care which were valued among patients, nurses, and physicians. Two control variables, personal liking and personal knowledge, were also used. Magnitude estimation procedures were employed to test the effects that the eight independent and two control variables had on the dependent variable, quality nursing care. Ten patients, ten nurses, and ten physicians were asked to estimate with a numerical quantifier the intensity of their subjective impressions when rating each nurses' abilities related to all eleven variables. The nurse stimuli skills and abilities varied yielding points on a ratio scale for each variable.

All results were analyzed and reported collectively by each subpopulation. Pearson product moment correlation coefficients were used to
determine the interrelationships among the variables. The data suggested that multicollinearity existed among all three subpopulations.

Multiple regression analysis was done to indicate which variables significantly predicted quality nursing care for each subpopulation. It was found that patients considered personalized care, competency in technical skills, and professional education as important attributes of quality nursing care. Nurses valued information source, professional demeanor, leadership abilities, cooperation with other personnel, and personal liking as important characteristics of quality nursing care. Competency in technical skills, personalized care, and professional creativity were valued among the physician subpopulation.

These empirical findings suggest that patients and physicians share the most similar perceptions of valued attributes of quality nursing care. The "caring" and "curing" aspects are strongly emphasized within these two groups. Nurses value "coordination" abilities as well as "caring" aspects of their nursing role.

From the findings it can be concluded that similarities and differences in perceptions of quality nursing care do exist among the three subpopulations studied. It is recommended that nurses assess patients' and physicians' perceptions of quality nursing care, and attempt to fulfill or alter these expectations. When the consensual attributes of quality nursing care are agreed upon, nurses can take actions toward fulfilling these expected characteristics.
March 1, 1976

MEMORANDUM TO:  A. Richard Kassander, Jr., Ph.D.
Vice President for Research

FROM: Milan Novak, M.D., Ph.D., Chairman  
Human Subjects Committee

RE: Deborah Oakes, "Patients', Nurses', and Physicians' 
Perceptions of Quality Nursing Care"

The purpose of this particular study is to find out which attributes 
of nursing care are valued by patients, by doctors and by other 
nurses. Registered nurses in the labor and delivery unit of 
Arizona Medical Center will be individually evaluated by the subjects, 
but all data will be reported collectively and no individual 
identities will be revealed. This project is part of a masters 
thesis and presents very little risk to those involved. I recommend 
approval without submission to the Human Subjects Committee.

Enclosure

Administratively Approved:

Charles H. Peyton
Assistant Vice President 
for Research
SUBJECT'S CONSENT FORM

I agree to participate in the study entitled, "Patients', Nurses' and Physicians Perceptions of Quality Nursing Care." I understand that the purpose of this study is to obtain different groups' views of what they consider to be the qualities of "good nursing." This information will be obtained through interviews conducted by the researcher. I understand that I will be interviewed twice while in the hospital setting. Each interview will take approximately 30 minutes. Both interviews will occur within 24-72 hours of one another, the time being at my convenience. During the interview I will be shown photographs of the nurses in the labor and delivery suite. I will then be asked to rate each nurse on eleven characteristics of nursing care. The ratings will be in proportion to the other nurses in this unit.

I understand that all the data will be analyzed and reported collectively. The individual ratings will be seen by no one other than the researcher. All names will remain anonymous.

I have agreed to the above "Subject's Consent." The nature, measurement procedures, and benefits of the project have been explained to me. Though no monetary payment will be made for my participation in the study, I understand that the results may lead to possible improvements in the quality of nursing care. It has been guaranteed that I may ask questions throughout the study and that I may withdraw from the project at any time without ill will. A copy of the study's results may be obtained upon its completion.

Subject's Signature: ____________________________ Date: ____________

Researcher's Signature: __________________________ Date: ____________
NURSES'S CONSENT FORM

I, ____________________________, agree to partake in the study entitled "Patients', Nurses', and Physicians' Perceptions of Quality Nursing Care." It is understood that I will be rated on eleven characteristics of nursing care by patients, physicians, and fellow nurses. My photograph will be used for identification purposes.

The nature and purpose of this study have been explained to me. It has been guaranteed that all information will be strictly confidential and all names will remain anonymous. The completed data will be analyzed and reported collectively. I understand that I may withdraw from the project at any time. Though no monetary payment will be made for participation in the study, I understand that the results may lead to possible improvements in the quality of nursing care.

Nurse's Signature: ____________________________ Date: ____________

Researcher's Signature: ____________________________ Date: ____________
**DATA COLLECTION SHEET**

Subject Code Number: 
Age: 
Educational Background: 
Ethnic Origin: 
Marital Status: 
Occupation: 
Subpopulation: 

<table>
<thead>
<tr>
<th>Nurse Stimulus</th>
<th>Quality of Nursing Care</th>
<th>Personalized Care</th>
<th>Information Source</th>
<th>Competence in Technical Skills</th>
<th>Leadership Abilities</th>
<th>Cooperation with Other Personnel</th>
<th>Professional Education</th>
<th>Professional Demeanor</th>
<th>Professional Creativity</th>
<th>Personal Knowledge</th>
<th>Personal Liking</th>
</tr>
</thead>
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