1-1-1995

The relationship between attitude toward economic issues and delivery of human caring in perioperative nursing

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THE RELATIONSHIP BETWEEN ATTITUDE TOWARD ECONOMIC ISSUES AND DELIVERY OF HUMAN CARING IN PERIOPERATIVE NURSING

by

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A thesis submitted in partial fulfillment of
the requirements for the degree of

Master Of Science

in

Nursing

Department of Nursing
University of Nevada, Las Vegas
May 1995

Approval Page

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May, 1995

ABSTRACT

While human caring remains an important aspect of nursing, the financial pressures facing the healthcare economy calls for nurses to work more cost-effectively. Using Watson's model of Human Care as the conceptual framework, this study looked at the relationship between attitudes toward economic issues and human caring in perioperative nursing.

The NCAS and BHNAS self-reporting scales consisted of a total of 80 items that measured nurses' attitudes regarding cost-effective practice and caring. The sample size was composed of both perioperative nurse managers and staff nurses (n=34). Data was analyzed utilizing frequency distribution, the Pearson Product Moment Correlation technique, and t-tests.

Currently, there is a paucity of information available on nurses' attitudes toward economic issues and how it relates to their perception of ability to practice caring behaviors. Empirical knowledge resulting from this study suggested that there was no significant correlation between cost-effective practice and perioperative nurses' perception of caring attributes.

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ACKNOWLEDGMENTS

This has been an incredible project and one I would not have completed without the support and encouragement of my friends and family.

I would like to thank my committee members for all their work and time in grooming my research project to its completion. I feel everyone I sought input from were very helpful and giving of their time.

Thank you to my coworkers, both past and present. I have been especially fortunate to work with such a group of compassionate and understanding individuals that appreciate a person's dream and have allowed me to reach for that dream.

I would like to thank my family, who have been understanding of my goal and always wonderfully supportive

Thank you to my dear friend Linda, who has listened tirelessly for all these years, and has always given me encouragement, right when I needed it.

And finally, thank you Jim, for believing in me and what I could accomplish. That kind of strength is what kept me going.

CHAPTER I

Introduction

The economic aspect of delivering health care has always been a difficult issue for nurses, but one with which nurses need to become increasingly more involved. Billions of dollars were spent on health care in the last several years and it is estimated the United States will top one trillion dollars per year by 1995 (Curtin, 1993). With the combination of numerous health care facilities closing (Blaney & Hobson, 1988) and individuals and families experiencing financial ruin due to uninsured health care costs, points to shifts occurring in the health care system. One major shift is one from a health care system viewed as a charitable public service to a system that is increasingly privately owned and profit oriented. The change in status will have an enormous impact on how nurses and other health care workers will be expected to do their jobs (MacPherson, 1989).

The story of the rise and decline of the Massachusetts Visiting Nurse Service (MVNS) (1909-1953) could serve as a case study to demonstrate how the profession of nursing is intertwined with the social issues of economics, demographic shifts, illness trends, and technology (Hamilton, 1988). While today's nurses grapple with the overwhelming task of combining quality caring with efficiency, eighty years ago public health

nurses vehemently resisted any nursing activities that regarded the financial status of their clients. National nursing leaders were quoted as saying that "Nursing is an emerging profession based on moral principles, duty and goodness of spirit" and that to reduce it to issues of costs and efficiency seemed common, unladylike, and tasteless (Hamilton, 1988).

In 1924, Dr. Lee Frankel, then director of Metropolitan welfare division, administering the MVNS, was noted as saying to the National organization of Public Health Nurses that if the "financial aspects of nursing services were not addressed, decisions will be thrust upon you and the future of public health nursing will not be bright". Frankel's declaration soon proved itself to be true. Just three years after Frankel's death, the volume of cases for the MVNS declined at a rate of 200,000 per years, yet the cost of a nursing visit steadily increased. Hamilton's historical research documents how the profession continually increased its clinical excellence and improved patient outcomes, but there came a point where the MVNS costs, coupled with declining volume, became larger than the Metropolitan Insurance company was willing to pay. Eventually a company decision was made to close the MVNS.

Hamilton concludes that a valuable lesson can be learned through the study of history. The story of the rise and fall of the MVNS may parallel public health nursing issues of today.

The Metropolitan nurses tenaciously believed, unfortunately, that their clinical excellence would ensure their future. Similar thoughts are prevalent in today's nursing population. Research on nursing attitudes about economics and practice (Cry,1990; Nyberg,1990; and Ray,1989), suggest that nurses are confronted with a dilemma. Nurses are demanded to define themselves in economic and accounting terms, on the other hand, nurses need to preserve the humanity of patients through human caring activities (Macpherson, 1989).

The nursing profession cannot continue to see nursing's role in the health care arena as one that is focused only on providing care without concerns to the economics of that care. Implications of this tunnel vision create a very real possibility that without nursing input, based on empirical data during the current health care debates, important decisions will be made for nurses concerning our practice. As an example, following the introduction of the Prospective Payment System (PPS), as hospitals economized nursing appeared an appropriate target for cost-cutting. This cost-cutting was without understanding the potential effects short staffing had on quality of care and the resulting increase in patients' length of stay. (Flood & Diers, 1988). The nursing profession must be proactive and address the relationship between nursing care and the economics of the health care system. The of health care and the restructuring of

the health industry have coincided with nurses' recommitment to themselves and to the traditional value of caring as the essence and unifying focus of nursing (MacPherson, 1989; Ray, 1987).

Problem Statement

Professional nurses, by virtue of their unique role in the patient care process, are ideally suited to function as the case manager. As the case manager, the focus should be on both patient care, and managing the cost-effectiveness of that care. Unfortunately, many nurses are ill-prepared to function in that expanded role (Blaney & Hobson, 1988). In addition, many nurses have come to believe that systematic attention to cost-effectiveness is virtually synonymous with both designing and delivering inferior care (Takes, 1992). This uninformed opinion may be due to the relatively few opportunities that nurses have had to obtain any formal education in cost concepts or cost-effectiveness in nursing practice. Efforts in the work place to improve cost-effectiveness, may be sabotaged if the prevailing attitude among practicing nurses is that cost-effectiveness reduces the quality of patient care.

As the economic structure of healthcare becomes more complex, will nurses assume the responsibilities for managing both the physical and financial care of the patient? Will nurses welcome this added responsibility and become educationally prepared. Considering the history of the Massachusetts Visiting

Nursing Service and the possibility that health reform will occur around nursing, a nursing study to explore the relationship between aspects of Human Caring and economic issues is timely.

Purpose Statement

The purpose of this study is to explore the relationship between the attitudes of perioperative nurses regarding economic issues and their environment to perform human caring activities. While nurses believe that they are still caring, they see economics as a severe threat to the continuation of caring practices (Nyberg, 1990).

The fact that health care is a very profitable business symbolized by the growth of an array of health care entities, an understanding of how economic issues influence the social context of health care workers is absolutely necessary. This is especially true now as nurses fight to implement an ethic of caring (MacPherson, 1989).

Significance of the Study

This study is significant to nursing as well as health care organizations that employ nurses to deliver health care. The economic goals of health care delivery can be directly influenced by attitudes of the staff. Empirical knowledge related to this relationship will provide behaviors to achieve those economic goals. Nurse educators may view the information from this type of study as an opportunity to modify or redesign nursing curricula

to include an economic focus which may better prepare nurses for the realities of health care today.

Perioperative nurses frequently believe that economic pressures such as staffing constraints, insufficient equipment and supplies, and increased surgery scheduling adversely affect the performance of the operating room team and their ability to provide human care in practice during the perioperative experience. The surgical area is regarded as a place in the hospital that consumes vast quantities of resources and usually is monitored closely to increase the hospitals' profit margin. Nowhere else in the hospital do nursing personnel have such a direct impact on supply and time usage as in the operating room (Takes, 1992). The present economic drive to reduce expenses and increase profits manifests itself in the nursing staff by decreasing patient care activities and increasing technical expertise.

Although patient outcomes are not measured in this particular study, if caring is deemed inherent to the nursing profession, and the practice environment restricts that characteristic, potential negative outcomes in the patient's experience must be evaluated

CHAPTER II

Review of the Literature and Conceptual Framework

Literature review

A comprehensive literature search revealed a paucity of nursing or allied health articles pertaining to the concept of caring and its relationship to economics. There are even fewer studies that focus specifically on perioperative nursing as a setting to address economic influences in caring practices.

Perioperative Nursing

The current Association of Operating Room Nurses (AORN) statement of perioperative nursing practice does not reflect that the perioperative nurse provides human touch, a factor which some researchers feel complement the high-tech atmosphere (Wyatt, 1989; Watson, 1985). The subject matter regarding the high-tech nursing tasks of perioperative nursing, sometimes referred to as "nursing trim" (i.e., the environment, procedures, focus on practice, specific techniques, terminology), is that they are viewed as the most important aspect of perioperative nursing; while the patient ceases to be the central focus for what nurses do (Watson, 1994).

Takes' (1992) study used the Blaney/Hobson Nursing Attitude Scale (BHNAS) to assess the 46 perioperative nurses from their attitudes toward cost-effectiveness in nursing practice. Initial validity and reliability measurements of the BHNAS were noted as: coefficient alpha computed at .75 and .80 in two administrations of the scale. Test-retest reliability was also assessed on the initial scale with a computed reliability coefficient of .81. A significant t-value of 5.10 ($df=67$; $p<.001$) supported the researchers' hypothesis that if the questionnaire measures cost-effectiveness, there should be more favorable attitudes in an experimental group which took a training session designed to improve attitudes than in a control group which did not participate in training. Takes' results suggested that the perioperative nurses in this convenience sample had relatively positive attitudes toward cost-effectiveness in their nursing practice. However, she noted that the mean of 75.6 out of 100, would indicate that there is room for improvement. Takes further contends that nurses in the study did not see quality versus cost conflicts as a major problem and nurses seem to know that cost-effective practice would improve the status of the nursing practice. Her results also suggested skepticism or neutrality about several important cost issues. The nurses perceived cost-

effective practice as contributing to the hassle of nursing with few professional benefits to themselves.

Nowhere in the hospital do nurses' attitudes and judgments influence the quality and economy of outcome more than in the operating room (OR) (Takes, 1992). The perioperative department of a hospital offers an excellent opportunity for nurses to implement cost-effective behaviors because of the vast amount of resources that are utilized (Sommers, Sakai, & Silverman, 1985). The operating room nurse is situated closely at the point of service. Further, the perioperative environment demands a high degree of collaborative practice between nurses and surgeons. With this in mind, the OR nurses' clinical judgment has the opportunity to be enhanced by cost-effectiveness information. If, for some reason, the nurse believes that economic control and quality of patient care are inversely related, he/she is likely to view cost-effective strategies as decreasing his/her capacity to provide satisfactory care to the patient. If this is the case, administration then has the responsibility to assess the perceptions and experiences of the nursing staff. This is a necessary step to evaluate the staff's readiness to participate in planning and activities regarding economic issues. Negative attitudes are identified and staff nurses, through education and discussion, come to understand and take ownership of the issues,

which is a crucial step to the success of any attitude-changing strategy (Takes,1992).

Campbell (1985), a nurse researcher at Stanford University Hospital, posed six identical open-ended questions to staff nurses and physicians related to what they perceived as important cost and quality issues encountered on a daily basis. She states that since the staff are the most knowledgeable individuals in the perioperative setting, they would have the most valid information related to costs and quality issues. The pilot study was directed at the current staff of 27 nurses and 3 physicians in a moderate sized, private hospital. The participants were asked questions such as "What do you see as the most important cost problems in the OR/PAC ?", and "What ethical dilemmas have risen as a result of conflict between cost and quality ?", and "When do you feel quality is compromised as a result of cost constraint?". Responses to these questions demonstrated that the staff were concerned about both cost containment and quality of care and these issues were perceived to be interrelated. The nurses believed that cost and time constraints were imposed on them by the system and the constraints were viewed as hampering the OR teams' performance thus directly affecting quality of care. The author pointed out the limitations of the study are the small sample size and the use of opinions as evidence; but also noted that the findings are strengthened by the substantial years of

experience and level of expertise of the nurses and physicians, therefore, giving validity to their views and opinions.

Economic Focus

Critical Care staff nurses' attitudes toward cost containment was studied by Cry, (1990) who analyzed data received from a questionnaire designed to explore Critical Care nurses' attitudes. The article did not include information on validity or reliability measurements on the tool, therefore, one must be skeptical of the interpretation of the results. Nurses (N=113) responded to a written questionnaire and data analysis suggested that financial accountability was regarded as a new role for nurses and nurse managers . Cry surmises that health care executives must insure that all workers in the system receive appropriate education in healthcare economics and are informed about specific institutional practices aimed at decreasing costs.

Healthcare economists believe that genuine savings can be realized "at the point of service" where health care providers make decisions as to what procedures to follow, what techniques to administer, what technical equipment to schedule, and what supplies to expend. Since nurses have most of the direct contacts with patients, they are in the ideal position to influence the actual delivery of care, although they do not prescribe or order

medical treatments (Cry, 1990). Cry further suggested that the attitude of nurses, and their perceptions of having the ability to influence cost-effective decisions in patient care, may be the crucial determinant as to whether they will participate in cost-effective practices.

Watson's theory of caring (1985) is the nursing model used by Nyberg (1990) for her research on care and economics. Nyberg states that Watson describes caring in nursing as a human science which is a moral commitment to protect human dignity and preserve humanity. Nyberg further contends that health care economists argue that protecting human dignity and preserving humanity can be achieved by the patient maintaining financial independence during hospitalization. The problem as defined by Nyberg is that many nurses see the dichotomy between economic management and providing quality care. Preserving caring values in nursing is critical to sustaining care ideals in nursing, but in combination with this assumption, Watson's theory might also suggest that an economic education would indeed promote a basis for caring in nursing. Nyberg's study explored nurses' reactions to recent economic changes in healthcare. Two instruments were used in this study, the Larson Care-Q tool and the Nyberg Caring Assessment Scale (NCAS). The reliability for the sub-scales of the Larson Care-Q tool ranged from 0.87 to 0.98 using Cronbach's alpha coefficient. The reliability for the NCAS, for the pilot

study population, ranged from 0.85 to 0.97 indicating excellent reliability for the entire questionnaire. The Nyberg Caring Assessment Scale was developed from caring attributes gleaned from a variety of previous studies. The author concluded after analyzing data from the 2,793 staff nurses in her study, that the nurses' ability to provide care is dependent on economic resources. In addition, the study suggested that nurses continued to see caring behaviors as important and even though the current economic environment is severe, will continue to use caring attributes in their work.

Dr. Ray (1987) has done extensive work in the area of economics and human caring and relationships within nursing administration. Ray discusses how the current developments in delivery of health care in the United States, with an emphasis on economics and rationing of scarce health care resources, have led to considerable moral perplexity for the nursing profession. She believes that little attention is directed to the evaluation of the process of human caring itself as an economic source in health care delivery. The author further discusses the phenomenon of social exchange theory as a possible method of placing value on human care to better integrate this concept into health care economic analysis. Ray concludes with the suggestion that nurses, who in reality control quality by their caring activities,

not allow economists, business managers, and physicians to be the sole directors of the American health care system.

MacPherson's (1989) article on "corporatization" of the health care system, details the current health care system as an environment in which nurses are not rewarded but rather penalized for trying to implement a caring ethic into their practice. MacPherson describes factors that have contributed to the restructuring of the health care system and new technologies such as patient classification systems that attempt to quantify direct nursing care as a means to increase corporate profits. The author describes a recent study that revealed that patient classification systems (PCPs) could not address the emotional needs of patients, the needs of the elderly, or unpredictable events that require nursing interventions. MacPherson concludes with strategies for making caring possible and stresses that social activism by health care workers is critical.

Blaney and Hobson (1988) have written a book that focuses entirely on economics and presents guidelines for nurse managers. They propose that the case manager will be the key to cost-effective health care delivery because of their unique position in the patient care process. Unfortunately, the authors believe many nurses are ill prepared to manage cost-effectiveness programs. Furthermore, they identify the more

problematic issue, which is the prevailing perception that cost-effective practices will lead to lower quality patient care. The authors' work with economic nursing issues led them to the development of the Blaney/Hobson Nursing Attitude Scale. The authors propose that before effective cost-effective behaviors can be instituted in the hospital setting, an assessment of nurses' attitudes toward cost-effectiveness in nursing practice is necessary. This assessment, which can be accomplished with the BHNAS, can be used by financial and administrative management to identify staff beliefs regarding economic issues. Once the attitudes are known, an appropriate education focus can be structured. Their book continues the exploration of economic issues with a detailed conceptual model, based on their perception of nursing's pivotal position as the patient's case manager, as well as discussion of changes necessary for the profession to achieve that model.

Caring

Five conceptualizations of caring have been identified. Caring as a human trait; caring as a moral imperative; caring as an affect; caring as an interpersonal interaction; and caring as a therapeutic intervention (Mores, Bottorff, Neander & Solberg, 1991). Following examination of the literature, the authors suggest that caring is emerging as a significant concept for

nursing, and is influencing nursing theory, research, practice, and education. Although there is some controversy as to whether caring is the single concept central to nursing, the majority of nursing researchers included in the literature review, agreed that caring is a unifying feature of nursing and deserving further development to define all the elements of caring.

Larson and Ferketich (1993) conducted a study to measure patients' satisfaction with nursing care using an empirically derived satisfaction measurement instrument, the Care/Satisfaction Questionnaire (CARE/SAT) and the Risser instrument. Cronbach's alpha for the item total of the CARE/SAT was .94. Alpha coefficients for each of the subscales exceeded the .80 criterion suggested in literature. Subscale correlation on the theoretically derived subscales were positive, but low enough (.48 to .67) to indicate the subscales were not redundant. Construct validity was supported by a pearson correlation coefficient of (r=.80, n=40), between the two instruments used. The authors defined caring as "intentional actions that convey physical care and emotional concern and promote a sense of sameness and security in another".

In the Larson and Ferketich descriptive, correlational study, 268 adult hospital patients, who were within 48 hours of discharge, were asked to complete the CARE/SAT questionnaire.

The authors cite previous studies (Cronin & Harrison, 1988; Keane, Chastain, & Rudisell, 1987; Larson, 1984; Mayer, 1987; von Essen & Sjoden, 1991) that suggested that patients, when rating the importance of caring behaviors, gave the highest ranking to caring items such as skill, knowledge, and judgment abilities of the nurse.

Each of the CARE/SAT questionnaire's subscales (Assistive, Benign Neglect, and Enabling) contain a composite of caring behaviors, such as "Trusting", "Monitors" and "Follows Through", and "Explains and Facilitates". The researchers suggested that in the health care climate of today, patients may experience instances of benign neglect due to hospital bureaucracy, and the nurse that "puts the patient first" will no doubt feel greatly challenged.

Von Essen and Sjoden's (1991) research on the perceptions of caring, used the Caring Assessment Instrument (CARE-Q, Larson, 1981), administered to 86 patients and 73 hospital nurses. No discussion was provided regarding the instruments' reliability or validity, but it was mentioned that the authors previously had investigated the cross-cultural validity of the instruments. The aim of the study was to measure patient and staff nurses' perceptions of most and least important caring behaviors. The patients ranked items concerned with giving

honest and clear information and competent clinical expertise as the most important, while the nurses ranked expressive/affective behaviors as the most important.

Caring Models

Two nursing leaders who have devoted their careers to studying and evolving the meaning of caring as the important central focus of nursing are Madeleine Leininger and Jean Watson. Both of these nursing educators have developed theories/models of caring as a way to integrate their ideas and beliefs with a unique research methodology. The evolution of each theorists' perspective of care reflects their own background and experiences (Cohen, 1991). Leininger's interpretation of caring emphasizes cultural differences, while Watson sees caring as the ethical and moral ideal of nursing.

Several nurse researchers (Ray, 1989; Corley & Raines, 1993; Nyberg, 1990) who have studied economics and caring in nursing, have developed theoretical models designed to increase nursing's viability in the organizational setting.

Ray (1989) states that the purpose of her qualitative research was to generate a theory of the dynamic structure of caring in a complex organization. The hospital setting was chosen because the bureaucracy that controls and pervades this health care system seriously challenges nursing's humanistic

philosophies. Ray's research demonstrated that the position and role a person held in the hospital organization markedly influenced the meaning of caring. This was characterized by administrative personnel who viewed caring as focusing on the competition for human and material resources responsible for the organization's viability. This contrasts with specific nursing units such as surgery, where caring was observed as patient advocacy, teamwork, and technical competency. Ray contends that the application and implementation of the Theory of Bureaucratic Caring is necessary to broaden the focus where management and caring views can realistically "represent the transformation of health care organizations to benefit humankind".

Corley and Raines (1993) developed a model for nursing administrators to consider in establishing a caring environment while functioning in the bureaucratic nature of hospitals. They propose that due to an organizational requirement of loyalty, nursing administrators influence of the hospital may be more powerful than the nurses' commitment to patients. This conflict may result in psychological stress for the nurse administrator as well as decreasing his/her ability to act as a role model for other nurses. Corley & Raines' article regarding their model proposal describes three areas nurse administrators identified as important for creating an ethical practice environment: autonomy;

trust; and communication. The authors caution that the some strategies developed by nursing to resolve ethical difficulties may, in fact, have negative consequences for the patient, institution, and themselves. Corley & Raines suggest that rather than the individual nurse proposing his/her own methods for ethical resolution , he or she use the resources of the nursing staff to provide interdisciplinary problem-solving groups.

Nyberg 's (1990) model concentrates on the concepts of economics and caring as viewed by a nurse administrator. The author has stated that economics and human care are the greatest driving forces in nursing administration today, and the Nyberg model demonstrates an integrative approach which nursing administrative personnel can use to effectively combine these two important concepts.

Nyberg (1993) also has discussed teaching caring to the nurse administrator. Using standard management theory, Nyberg discovered that "generic" management could be different from "caring" management. For example, the differences found among staff in an environment that stresses the use of power in a "generic" management setting, versus emphasizing empowerment in a "caring" management setting. It is the author's belief that the current economic pressures facing the nurse administrator, requires an educational background providing an understanding of

both business efficiency and principles of a caring environment for nursing. In that way it is possible to reflect the professionalism of nursing integrated with organizational efficiency.

Attitude and Motivation

An underlying assumption of the current study is that the term attitude refers to a predisposition to respond in a favorable or unfavorable manner toward a person, object, or concept. In other words, an attitude reflects our feelings about a particular topic (Blaney & Hobson, 1988), therefore a brief discussion of this widely researched topic is warranted.

Blaney & Hobson outline several basic assumptions about the definition of attitude that create the framework for any potential research about this construct.

1. Attitudes are not observable in themselves, although the behaviors they may produce can be.

2. Attitudes exist on a continuum of feelings, which may be expressed from very favorable to very unfavorable.

3. Attitudes are not directly observable, however, attitudes can be effectively measured by several documented techniques.

4. Attitudes represent a basic learning process.

5. There is considerable evidence that attitudes are related to subsequent behavior, and a strong belief that a person's attitude toward a person, object, or concept will indicate how that person will behave.

While a majority of the literature reviewed concerning human caring and subsequent effects contained references to a behavioral scientist's discussion on attitudes, Blaney and Hobson (1988) state that Ajzen and Fishbeins' attitude model is the most widely accepted, well-formulated, and research-supported model. This model conceptualizes the attitude process into four basic components, starting with beliefs, attitudes, behavioral intentions, and actual behaviors arranged in a causal relationship.

Goldenberg and Laschinger (1991) tested the Ajzen-Fishbein 1980 theory of reasoned action in a student nurse population about acquired immune deficiency syndrome (AIDS) patient care. This theory delegates two components that determine individual's intentions to engage in certain behaviors. These two components are attitude toward the behavior and subjective norms. Goldenberg and Laschinger's research consisted of 46 second year student nurses completing a questionnaire developed according to guidelines described by Ajzen and Fishbein (alpha reliability range was .69-.85) prior to and following instructional component on the care of patients with AIDS. The results of their study

suggested that student's attitude and subjective norms were found to be significant predictors of behavior intentions toward patients with AIDS; in addition, the effects of the instructional component were significantly demonstrated as changes in both attitude and subjective norms.

An important distinction needs to be made when talking about behaviors and behavioral intentions. The Ajzen-Fishbein model indicates that attitudes do not lead directly to behaviors but rather to the intention, or planned response. This strong causal relationship from attitude to behavior intent to behavior, may make negative nursing attitudes toward cost-effectiveness a significant obstacle in efforts to reverse those behaviors.

Summary

Although there have been relatively few research studies about health care economics and its effects on the nursing profession, the available information demonstrates that nurses are aware that the financial viability of both health care providers and clients is a major concern to all. Several studies, (Campbell, 1985; Nyberg, 1990; Cry, 1990; Takes, 1992) looked at nurses' perceptions of economics within their profession and while the nurses felt the issue was important, it was reported that many nurses believed encompassing cost-effective measures

within their nursing practice contributed to the hassle of nursing and decreased their ability to provide quality patient care.

Studies of the impact of the present economic focus has had on the nurses implementing caring and ethics in nursing practice (Ray, 1987; MacPherson, 1989; Nyberg, 1993) have shown that the present economic emphasis has created confusion, stress, and an environment that penalizes rather than rewards nurses for their caring behaviors. The literature review revealed studies that supported "caring" as an integral part of nursing, and a concept that patients can identify (Larson & Ferketich, 1993; von Essen & Sjoden's, 1991). Using caring as the basis of nursing, several nurse researchers have outlined models that they believe will combine the structure of caring in a complex organization such as a hospital. The introduction and implementation of new cost-effective concepts to nurses, needs to be prefaced by evaluation of the prevailing attitudes toward economic concepts, and then structuring educational programs to meet the needs of the individuals involved (Blaney & Hobson, 1988; Takes, 1992; Cry, 1990; Nyberg, 1989).

Conceptual Framework

Watson's theory of human care was chosen as the conceptual framework for this research study because of it's holistic view, broad application and transrelationships of mind,

body, and spirit of the person in a continual, dynamic world. It addresses the core of nursing (therapeutic nurse-patient relationship) and not the trim of nursing (procedures, tasks, techniques) (Cohen, 1991), which is a relevant approach for areas such as perioperative nursing. Caring, as an activity as well as an attitude, is central to effective, skilled perioperative nursing practice (Parsons, Kee, & Gray. 1993). These authors further define perioperative nurses' caring behaviors ranging from preserving the dignity and privacy of the patient as well as attending to the patient's physiological condition.

Specialization, a result of advanced technology, has allowed perioperative nurses to provide enhanced patient care, and relieve the nurse of mundane, repetitive tasks. Conversely, this same technology has the potential to decrease direct patient care and to have nurses become overly dependent on machinery. The challenge for the perioperative nurse in this high-tech environment is to demonstrate that therapeutic human touch is as paramount to their patient care activities as competency is with equipment (Watson, 1994)..

Jean Watson originated the theory in an effort to address philosophical, conceptual and empirical issues confronting nursing and maintain the concept of person in nursing (Cohen,

1991, Fitzpatrick & Whall, 1989). Watson (Cohen, 1991) defines caring as:

> the moral ideal of nursing whereby the end is protection, enhancement and preservation of human dignity. Human caring involves values, a will, and a commitment to care, knowledge, caring actions, and consequences. All of human caring is related to intersubjective human response to health-illness; environmental-personal interaction; a knowledge of the nurse caring process; self knowledge, knowledge of one's power and transaction limitations.

Watson (Cohen, 1991), further states that:

> caring for the nurse begins when he/she enters the patient's frame of reference, subjective reality composed of the totality of the human experience, which she labels as the "phenomenal field", and responds to the patient's condition of being in such a manner that the patient releases subjective feelings or thoughts that the patient has longed to release.

The structural overview of the Watson's Model of Human Care is centered around three primary components. The first is nursing and it is viewed within the context of a human science as well as an art. The term "human science" is used by psychologists and nursing theorists to describe psychology as a

discipline committed to the study of the person as a whole, as opposed to the psychoanalytical or behaviorist views of psychology that view the person in reductionistic terms of natural science, basic science and biomedical sciences.. This alternative view of nursing that Watson suggests places nursing within a metaphysical context of a human-to-human care process with spiritual dimensions, rather than a set a behaviors that conform to the traditional science/medical model. This perspective of nursing therefore, augments the physical attention to the patient with true caring. Caring calls for a philosophy of moral commitment toward protecting human dignity and preserving humanity, as well as the requirements of knowledge, dedication and human values (Chinn, 1990). Watson further defends her position of nursing as a human science by stating that nursing is always threatened and fragile, and because human care and caring requires a personal, social, moral, and spiritual engagement of the nurse and a commitment to oneself and other humans, nursing offers the promise of human preservation in society (Watson, 1985). Human caring in nursing, therefore, is not just an emotion, concern, attitude or benevolent desire. Caring is the moral ideal of nursing whereby the end is protection, enhancement, and preservation of human dignity.

Mutuality of person/self of both nurse and patient with mind-body-soul gestalt, within a context of intersubjectivity is

the second component within the structure of the theory. Watson proposes that all of human caring is related to intersubjective human responses to health-illness conditions; a knowledge of health-illness, environmental-personal interactions; a knowledge of the nurse caring process; self-knowledge, knowledge of one's power and transaction limitations. With this in mind, the nurse does not approach caring as if it were simply a matter of good intentions, but rather as an epistemic endeavor that defines nursing through serious study, reflection and a search for new knowledge and insight. This discovery process will govern some of the epistemological, ethical, intuitive, esthetic, scientific, and methodological conditions for developing nursing as a human science.

The last component in the theory states that the human care relationship in nursing is a moral ideal that involves concepts such as phenomenal field, actual caring occasion, and transpersonal caring. The phenomenal field, also called subjective reality, is the individual's frame of reference known only to that individual. This is the person's perception of self and it defines the persons responses and interactions within the environment. A person's phenomenal field is dynamic and combined with the meanings and the symbolic nature of one's perceptions comprises one's life history, present as well as imaged future. An actual caring occasion occurs when both the

patient and the nurse make a conscious decision on how the relationship between the two will be experienced.

The human-to-human care process termed transpersonal caring relationship is dependent upon this foundation:

1. A moral commitment to protect and enhance human dignity as determined by each individual.

2. The nurse's intent and will to affirm the subjective significant of the person.

3. The nurse's ability to accurately detect and assess the inner condition and feelings of another.

4. The ability of the nurse to assess and realize another's condition of being-in-the-world and to feel a connection with another. The realization that the subjectivity of the patient is as valid and as whole as that of the nurse (Mutuality).

Selected definitions are included in the structural overview of Watson's theory of human care which are necessary to understand the theory's perspective and how the theory guides the present study.

Nursing-The human science of person and human health-illness experiences that are mediated by professional, personal, scientific, esthetic, and ethical human care transactions. Nursing activity is the human-to-human care process that includes the

commitment to caring as a moral ideal (Fitzpatrick & Whall, 1989) and concern for the health of individuals and groups of people. Nursing's global approach to the person as a whole encompasses all areas including financial viability (Nyberg, 1989).

Goal of nursing-Humanistic art and science whereby health/illness experiences are mediated by professional, personal, scientific, aesthetic, and ethical transactions (Cohen, 1991) in an effort to help persons attain a higher degree of harmony within mind, body, and soul.

Interventions-Because care and love are necessary for life (Watson, 1985), the human-to-human caring relationship in which patient and nurse engage in is essential for healing. Interventions, based on carative factors, are aimed at a positive change for the welfare of others, while leading to growth for the nurse. The carative factors listed below build on each other and are presupposed by a knowledge base and clinical competency.

Carative factors:

1. Humanistic-altruistic system of values.
2. Faith-hope.
3. Sensitivity to self and others.
4. Helping-trusting human care relationships.

5. Expressing positive and negative feelings.

6. Creative problem-solving caring process.

7. Interpersonal teaching-learning.

8. Supportive, protective, and/or corrective mental, physical, societal and spiritual environment.

9. Human needs assistance.

10. Existential-phenomenological-spiritual forces.

Values-Inherent in this theory is the value of the deep respect for the wonder and mysteries of life and the power of humans to change, a high regard for the spiritual-subjective center in each of us, and a non-paternalistic approach to helping each other gain a higher sense of knowledge, control and healing abilities irrespective of the presenting health-illness condition.

Illness-A subjective turmoil or disharmony within a person's inner self, at some level, whether conscious or unconsciously. This incongruent state may lead to illness and disease processes.

Health-A unity and harmony within the body, a congruent state between mind, body and soul.

Agent of change-The individual patient through their personal, internal mental-spiritual mechanisms. The self is healed by allowing various external or internal agents and the

intersubjective interdependent process of both patient and nurse to transcend self and usual experiences. Patient/Person-Watson frequently interchanges person and patient. This terminology may reflect her belief that both nurse and person enter a relationship as persons who participate equally and grow and learn from the encounter (Fitzpatrick & Whall, 1989).

Environment-Watson conceptualizes environment, as part of a person's immediate external world, which includes those forces in the universe, nature and external reality (Fitzpatrick & Whall, 1989).

The nurse may engage in transpersonal relationships in a variety of situations, and the other person need not necessarily be a "patient", but anyone in the healthcare arena that may be experiencing distress. In this study the patient will be the perioperative nurse.

The Watson human care process will enable the researcher to assess the perioperative nurse, within the phenomenal field that encompass that person, to determine if there is a relationship between economic concerns and caring behaviors of the perioperative nurse.

It has been suggested from the review of the literature that nurses feel that the concept of caring is intrinsic to nursing and that it is essential for patient healing. Some references

presented discussions affirming that patients perceived certain nursing behaviors as important components of care (von Essen & Sjoden, 1991, Larson & Ferketich, 1993). If these research conclusions empirically comprise the foundations of nursing, and then if the nurse is not allowed to provide caring activities, one can presume that the nurse may experience incongruency in his/her professional role. This incongruency could lead to a nursing approach that is less than holistic and positively outcome oriented.

This research study will investigate the possibility that the external environmental stress experienced by perioperative nurses e.g. (decreased staffing, supply and equipment insufficiencies, and scheduling conflicts) combined with internal environmental stress (developmental conflicts, fatigue, inner suffering) create an incongruency between the self as perceived and the self as experienced. This disharmony of mind, body and soul may alter the nurse's perception of her ability to provide consistent caring behaviors to clients. The nurse perceives she is unable to complete her mission to deliver care and this creates animosity toward the profit orientation of the corporation that curtails his or her opportunities to deliver nursing (Corley & Raines, 1993).

This study will view the health care system as the "environment" and the perioperative nurse as the "patient". The health of the patient will refer to unity and harmony within mind, body and soul; the degree of congruence between the self as perceived and the self as experienced, that is, the perioperative nurse functioning professionally and adjusting positively, to the influences of environmental stress. "Nursing" will be nursing administrative personnel.

Assumptions

The assumptions for this study were reflective of the literature review, Watson's theory of human care, and the researcher's clinical expertise.

1) The questionnaire will be truthfully answered.

2) Caring is an inherent trait of nursing, necessary for healing.

3) All perioperative settings will have some type of economic concerns.

4) Perioperative registered nurses will be used in the surgical setting to deliver patient care.

Research Questions

Healthcare practitioners agree that quality of care is their highest mission. However, human caring and economizing

resources are so interdependent in today's hospital environment that the monetary cost of care has entered the definition of quality itself (Takes, 1992). Unless nurses are willing to participate in shaping cost-effective systems and transforming their personal behavior to implement those systems, they cannot favorably influence the allocation of resources. That willingness depends upon attitudes toward cost-effectiveness with regard to nursing as a profession, ability to provide human caring consistent with quality, and to the institution's reputation and financial well being (Takes, 1992).

Perioperative nurses are in a position that makes them patient advocates for persons whose particular life situation makes them vulnerable to economic exploitation. Takes (1992) believes no other healthcare provider is so continually well-informed about a patient's immediate needs throughout his surgical experience. This position then obligates nurses to distinguish necessary resources for producing desired outcomes from superfluous ones. Takes states that despite their misgivings, nurses are ethically responsible for cost-effective behavior in their practice, as well as clinical efficacy.

The aim of this study was to assess perioperative nurses' attitudes about economic factors in healthcare and whether these factors are perceived as correlating to the nurses' perception of

his/her ability to provide human caring. The focus of exploratory studies is identification of factors related to the primary phenomenon of interest. The results of exploratory studies are often the generation of hypotheses to be tested in subsequent studies. For that reason, research questions will be used instead of a hypothesis.

The questions this study addressed were:

1) Is there a relationship between nurses' caring attitudes and their attitudes of cost-effectiveness?

2) What are perioperative nurses' attitudes toward cost-effective practice?

3) Is there a difference between perioperative staff nurses and perioperative nurse managers' attitudes toward cost-effective practice.

4) What are perioperative nurses' attitudes toward caring attributes?

5) Is there a difference between perioperative staff nurses and perioperative nurse managers' attitudes toward caring?

6) Are these caring attributes perceived by perioperative nurses as a whole, perioperative staff nurses, and perioperative nurse managers to be present in their supervisors?

7) Are these caring attributes perceived by perioperative nurses as a whole, perioperative staff nurses, and perioperative nurse managers to be more or less present in the hospital as compared to five years ago?

Definition of Terms

The terms utilized in this research study were defined as follows:

1) Attitude - predisposition to respond in a favorable or unfavorable manner toward an object, person, or concept; an attitude reflects our feelings about a particular topic (Blaney & Hobson, 1988).

2) Beliefs - opinions or convictions about facts that are not immediately provable. The nurse's beliefs about whether economic factors and the allocation of scarce resources are nursing concerns directly related to their delivery of care to the patient, would be relevant to any process to educate.

3) Economic issue - resources available and required to deliver patient care in the perioperative setting. Included in this are supplies, procedure turnover time, staffing, and scheduling.

4) Cost-effective behavior - the nurse's ability to select supplies, scheduling, and increase staffing

utilization as means of decreasing costs while maintaining quality.

5) Administration - individuals with the authority to influence any process involved in economics in the healthcare setting. Nurse managers, educators, physicians, healthcare economists, and the financial office of the hospital would be appropriate for this study.

6) Perioperative nurse - a licensed registered nurse who provides nursing care during a patients' perioperative experience.

7) Caring - Watson (1985) describes caring as a philosophy of moral commitment toward protecting human dignity and preserving humanity. Caring is seen as grounded in a set of universal human values such as kindness, concern, and love of self and others (Nyberg, 1989).

Limitations of the Study

One limitation was the relatively small sample of perioperative nurses, located in the same geographic area. Ideally, the results from this study would have greater impact if the researcher had used a national cross section sample of perioperative nurses. The hospitals the nurses are presently working in range from small to large capacity (5 operating suites to 25 suites) and the type of cases performed also range from

minor to major surgical procedures. This may allow for some latitude in the sample size due to the hospital's difference in size and type of surgery and removes the variable of not classifying the perioperative nurses in one particular hospital setting (i.e. open heart procedures versus hernia procedures).

"The major weakness of descriptive correlation research is that cause-and-effect relationships cannot be established", states Nyberg (1989). This author further explains that while the variables may be related, the relationships may be causal or merely circumstantial. With any study there may be unknown variables that are contributing to the relationship, therefore the researcher merely postulates what the results have stated.

The Nyberg Caring Assessment Scale is relatively new and only parts of the scale (Care Q) have been tested for validity and sample testing. A pilot study performed by Nyberg, using the new tool, demonstrated excellent reliability and validity within the subscales. The Blaney/Hobson tool has been demonstrated as possessing the required validity and reliability measurements, but the combination of using the two instruments has not been done.

CHAPTER III

Methodology

Research Design

Correlational descriptive surveys allow the investigator to assess the extent to which levels of one phenomenon correspond to levels of another; in this case, determination of the relationship between economic attitudes and attributes of caring with perioperative nursing practice. Exploring association and difference is an important mode for theory generation. Exploratory studies serve this purpose and are particularly useful during the early stages of investigating the relationships between phenomena about which not much is known.

Research Setting

In a correlation survey, a sample representing a cross section of a single population of interest is studied. Ideally, random sampling approaches are employed to generate a sample; however, non probability sampling can be used. Although, the former plan enhances the generalizability of the study results, the latter approach often has the advantages of feasibility and lower cost. In this study, the target population was perioperative nurses working in a hospital setting. Economic issues are different by type of institution. For example, ambulatory settings' use of supplies and procedures are not the same as in

the acute care hospital as patients are sicker, and there are different priorities for care. Therefore, extraneous variables in the patient care settings need to be controlled. For the data collection, four hospital surgical units rather than a clinic, doctor's office surgery setting, or ambulatory center, were used within the urban geographic area of a southwestern state.

Sample

The target population consisted of hospital based perioperative nurses nationally. The accessible population was a convenience sample of hospital-based perioperative nurses in a large metropolitan city, in a southwestern state, for a total of 148. Use of a convenience sample implies the assumption that if perioperative nurses' attitudes differ toward economic issues and caring, it would be because of other factors, rather than physical location. Employing this assumption decreases the generalizability of the findings, but due to time and financial considerations no reasonable alternative exists. The effect size for this phenomenon (attitude toward economics in relation to caring) is fairly extensive. That is, most nurses feel economics should not play a part in patient care. Therefore, the sample size can be smaller than if the effect size was small. Small effect size requires a larger sample to detect change.

The perioperative nurses were identified through two manners. Initially the researcher used the local Association of Operating Room Nurses chapter that maintains the names of perioperative nurses in the area. To augment that list, a comprehensive scheduling summary of all perioperative nurses employed in each hospital was used. These lists, containing only the names of the employee, were obtained from the surgery departments of the hospitals. The researcher matched the names with the addresses from a State Board of Nursing roster, which were used as mailing labels. Using the chapter roster and the hospital scheduling lists reduced the chances of sending a survey to a nurse working in a non-hospital setting, although the possibility existed that a nurse may be working concurrently in more than one setting.

Criterion for selection into the sample was based on several factors. All perioperative nurses were sent the survey and the data was analyzed as a whole and between staff level and management nurses separately. The demographic sheet had several questions about current position, whether full-time or staff or management, and what previous position was held. This information separated management from staff level nursing (management's focus would be different) reducing the margin of error on the investigator to attain that information before hand. In addition, only the data from those perioperative nurses who

work directly with patients, either staff or management, was used. The nurses who work in the surgical supply area or with the department charging system, would be viewed as having additional knowledge about economic factors that the staff level and management nurse may not, and consequently, those individuals were not included in this study.

Human Subject Rights

Prior to implementation of this research study, all participants were given a letter of introduction about the study discussing purpose, benefits, risks, and method of maintaining confidentiality. Each participant (hospitals included) was supplied with an address and phone number of the principal researcher in the event of questions or concerns regarding the questionnaire. The letter of introduction also outlined the intent of the study, who it will directly and indirectly benefit, the issue of costs, and how to return the questionnaire. The recipients of the surveys were informed that participation was voluntary, and that they may withdraw at any time. (Appendix A)

The researcher mailed the Blaney/Hobson Nursing Attitude Scale, and Nyberg Caring Assessment Scale, along with a descriptive survey to the identified perioperative nurses (Appendix D). The research packet was accompanied by a self-

addressed stamped return envelope, and all were followed up with a reminder postcard ten days later.

Data Collection Methods

Techniques

The investigator fulfilled the requirements of the thesis committee and obtain permission from UNLV Human Rights Committee prior to initiation of research. Concurrently, the copyright consents from the authors of both instruments were obtained for use in this research. Janet Nyberg, Ph.D., RN for the Nyberg Caring Assessment Scale, (1989), and Doris Blaney, RN, Ed.D., and Charles Hobson, Ph.D, for the Blaney/Hobson Nursing Attitude Scale, (1985). (Appendix B).

Instruments

There were two instruments used for this research project (Appendix D). The instrument that was used for measuring nurses' attitudes toward cost-effectiveness in nursing practice was the Blaney/Hobson Nursing Attitude Scale (BHNAS). The scale was developed in 1985, specifically to address economic issues with nurses in a research project at Indiana University. Rigorous research studies have been conducted with the Blaney/Hobson scale to evaluate its reliability. Reliability was computed at .75 and .80 in two administrations of the test. Test-retest reliability which is important if the same measurement

will be applied at two or more points was .81. Although this study's design calls for only one administration of the instrument, further studies may want to add a component of education as a treatment between tests, therefore this would be an important consideration. The results indicated that the scale was a highly reliable tool and well exceed the minimum standards for acceptable reliability adopted by psychometricians (Blaney/Hobson, 1988).

Interpreting reliability is based on the proposed purpose of the instrument. If the scale is being used for group-level comparison the reliability coefficient may be less than if the instrument is being used for lifesaving decisions. A coefficient of .80 is acceptable for mature scales.

Validity, which suggests that the scale is actually measuring nursing attitudes toward cost-effectiveness, has been tested extensively and the results are strongly supportive. The authors have made this determination through research between nurses' attitudes and performing their jobs in a more cost-effective manner that is statistically significant. Additional research to support the validity was to administer the test, present a training program designed to improve nursing attitudes toward cost-effectiveness, then re-test. The scores demonstrated a statistically significantly improvement. This

information indicated that the scale accurately measured nursing attitude by virtue of its sensitivity to the content and the purpose of the training program. The authors also administered the test to three subgroups, including supervisory positions. The result confirmed the hypothesis that attitudes would be most positive in supervisory staff and least positive in staff nurses (Blaney/Hobson, 1988).

Takes (1992) completed research on perioperative nurses' attitudes toward cost-effectiveness and used the Blaney/Hobson attitude scale. She stated that the tool possessed the required validity and reliability measures. In her article she quotes the original research to test the scale as confirmation of the qualifications of the instrument. The author felt that the scale fulfilled its requirements and was very useful in assessing nurse's attitudes.

The second instrument used was the Nyberg Caring Assessment Scale (NCAS). This instrument was developed by Jan Nyberg, Ph.D., RN for a research study (1990) on economics and caring. This questionnaire was developed by identifying caring attributes from a variety of previous studies. A pilot study of the questionnaire was conducted using graduate nursing students at the State University. Reliability for the sub-scales (ideal, actual, five-year, and supervisor's) ranged from 0.87 to 0.97

indicating excellent reliability for the pilot study, as well as for the research project. The author did further testing on the instrument to support its use by comparing the results across hospitals between sub-groups. Correlation between caring scores and economic indicators (total nursing hours per patient by acuity) was assessed. Those hospitals who provided more nurses per patient exhibited higher actual caring scores. The only qualification to participate in the Nyberg study was possession of a registered nursing license (2,793 nurses included, 350 were randomly selected), this scale measures caring as a universal attribute and not necessarily by nursing specialty.

The BHNAS and the NCAS appear to be easily read and response time is relatively short. The questions on the scales focus on the subjects and give a wide range of choices in an attempt to prevent inaccuracies. The BHNAS has been repeatedly used but the Nyberg Caring Assessment Scale was relatively untested; however, as mentioned previously, the reliability and validity was adequate and the use of these instruments in this and additional research will further enhance reliability.

At present, there are very few ways to evaluate nurses' attitudes toward economic factors and the Blaney/Hobson instrument appears promising. The BHNAS assigns 1-5 points for each answer with a range of 20-100. The midpoint is 60 and

higher scores suggest a generally negative attitude toward cost effectiveness while lower scores reflect a positive attitude. The item scores are totaled to provide an overall measure of attitude. For the scoring to function properly, any negatively worded items must be reverse scored. Ten negatively worded items are included in the survey (3,5,7,8,10,12,13,17 and 18).

The Nyberg Caring Assessment Scale is scored similarly to the BHNAS. The scale has twenty 1-5 point answers with a total range of 20-100. The higher the score, the more important caring was viewed by the respondent. Lower scores indicated caring attributes as being less important.

Data Analysis

The two scales must be kept together for each participant. The surveys were coded by number for ease of retrieving information or variances at a later time, and retained in a locked file cabinet to insure confidentiality. The scores were then processed through the SPSS Computer Program. A scatter plot was used to determine the direction, shape, and the magnitude of any relationship between attitude toward cost-containment and caring. A positive correlation exists when high values on one variable are associated with high variables on the second variable. A negative correlation exists when high values are associated with low values of the second variable. The degree to

which the plots are clustered around the diagonal slope determines the strength of the association.

The strength of the relationship is expressed by the correlation coefficient. The greater the absolute value of the coefficient, the stronger the relationship between the two variables. The range is from -1.00 to +1.00. When two variables are positively correlated they are directly related, when they are negatively correlated they are inversely related. A psychosocial variable correlated at 0.80 is said to be quite high.

In addition to the total scores, each question from the tools was calculated for the mean and standard deviation. This was an estimation of how statistics may be expected to deviate from parameters when sampling randomly from a population. The standard error of the mean, if small, indicates the precision of the estimates of the parameters. To minimize the size of the standard error of the mean is to increase sample size.

Each scales' total score was correlated with the respondent demographics to assess for any relationships. The results are tabled as indicated in Chapter IV. The seven research questions were assessed using the two instruments and demographics and analyzed for any correlation between variables. The statistical techniques used were the Pearson Product Moment Correlation, t-tests, and Means and Standard Deviation.

The BHNAS was used to assess attitudes about economic factors in the context of nursing practice. This scale identified negative or positive attitudes toward cost-effectiveness. The NCAS was used for assessing caring attributes and the degree of importance to the participants on three different subjects. The demographic data identified various characteristics of the sample. These variables were then analyzed to check for any correlation. The correlation identified any significant relationships for this descriptive survey.

CHAPTER IV

Results

Initial Analysis

This chapter will devote itself to reporting of the empirical exploration of economic focus and human care as it relates to perioperative nurses in a southwestern region of the country. The sample and population is described. In addition, statistical analyses are reported as they address the research questions identified for the study.

The surveys were sent to 148 hospital based perioperative nurses, as identified through the Association of Operating Room Nurses chapter directory and hospital surgery scheduling sheets. Of the 148 surveys mailed, one was returned as undeliverable and 34 were returned completed. This return rate therefore was approximately 23%. Two of the surveys returned were missing all the information on one page of the three page Nyberg Caring Assessment Scale, while all other surveys were complete. All participants completed the Blaney/Hobson Nursing Attitude Scale, therefore no surveys were eliminated.

Demographics

The characteristics of the sample population (Tables 1, 2, and 3) were obtained by calculation from the Perioperative Nurse Demographic Data sheet that accompanied all of the surveys.

Descriptive statistics were used to organize the data for ease of reporting. Age of the perioperative nurse ranged from 31 to over 61 years of age. The majority of respondents were between the ages of 41 to 50 (47.1%). The 34 participants of the study were composed of 31 (91.9%) females and 3 (8.8%) males. The demographics specific to marital status choices were either married or single and this population had 27 (79.4%) married and seven (20.6%) single.

Types of professional degrees were separated into five categories. Associate degrees were reported by twelve participants (35.3%). Seven individuals reported their degrees as baccalaureate (20.6%), Master of Science in Nursing were held by two of the perioperative nurses (5.9%), and Diploma in Nursing was reported by 13 (38.2%) respondents. The category of other was answered by three participants with inclusion of one of the above and additional information of Masters of Business Administration (MBA), Masters of Health Care Administration (MHCA), and Register First Nurse Assistant (RFNA).

Table 1.

Sample Demographics Regarding Age, Gender, and Marital Status of All Perioperative Nurse Respondents..

N=34

Demographics	N	Percent
Age in Years		
less than 20	0	0
21-30	0	0
31-40	10	29.4
41-50	16	47.1
51-60	7	20.9
61 and over	1	2.9
Gender		
Male	3	8.8
Female	31	91.2
Marital Status		
Married	27	79.4
Single	7	20.6

Table 2.

Sample Demographics Regarding Type of Nursing Degree, Years of Perioperative Nursing, and CNOR Certification for All Perioperative Nurses.

N= 34

Category	N	Percent
Type of Nursing Degree		
ADN	12	35.3
BSN	7	20.6
MSN	2	5.9
Diploma	13	38.2
Years of Perioperative Nursing		
0-5	12	35.3
6-10	5	14.7
11-20	14	41.2
21-30	8	23.5
31+	3	8.8
CNOR Certification		
Yes	13	38.2
No	20	58.8
Missing	1	2.9

CNOR. Certified Nurse in Operating Room

Table 3

Sample Demographics Regarding Current Primary Nursing Position and Previous Nursing Position for All Perioperative Nurses.
N=34

Demographic	N	Percent
Previous Nursing Position		
Full-time Staff RN	23	67.6
Full-time Management	9	26.5
Other (educ, ect.)	2	5.8
Current Primary Nursing Position		
Full-time Staff RN	24	70.6
Full-time Management	9	26.5
Missing	1	2.9

Years of perioperative nursing ranged from 0 to 31 plus years and were grouped by sets. The majority of nurses had between 11-20 (41.2%) years of experience in the perioperative setting and the next largest grouping was between 0-5 years (35.5%). Thirteen (38.2%) perioperative nurses who reported they had received the operating room nurse certification (CNOR) in contrast to twenty nurses (58.8%) who have not. One was reported as missing.

Previous and current nursing positions were the last two questions on the demographic sheet. Twenty-three (67.7%) perioperative nurses responded that their previous nursing positions were as full-time staff RNs and nine (26.5%) nurses marked previous positions as being full-time management. Current positions were grouped within either full-time staff, full-time management or other. Twenty-four nurses (70.6%) reported their current positions as perioperative staff nurses and nine (26.5%) responded in the management category. One (2.9%) participant failed to answer this question.

Correlation Between Demographics and Scales

The Pearson Product Moment Correlation technique was performed on the demographic variables and the mean of each scale, the BHNAS, and the NCAS #1,2,3, to analyze relationships. The correlational matrix was examined and several relationships

were demonstrated. Age and nursing degree showed a significant relationship (p=.006) which demonstrated internal consistency of the data. Years of experience also shared a significant positive relationship with age, (p=.016), and degree, (p=.042). With an increase in age you would expect an increase in years of experience and less opportunity to obtain higher degrees..

Years of experience also correlated positively with the Blaney/Hobson Nursing Attitude Scale (p=.062) at the .05 level. Marital status correlated with both perioperative certification (CNOR) with a significance of p=.047, and the NCAS #1, (p=.05), which focused on personal importance of caring attributes.

BHNAS and NCAS #1,#2,#3, Individual Questions Statistical Analysis for Mean and Standard Deviation.

Each scale's individual questions were statistically analyzed for deviations from parameters and upon examination of the data they appeared consistent with the scales total means and standard deviations.

Research Questions

1) Is there a relationship between nurses' caring attitudes and attitudes of cost-effectiveness?

To determine whether there was any relationship between nurses' caring attitudes and attitudes of cost-effectiveness, the Pearson Product Moment Correlation Coefficient method was used

through the SPSS computer program. Thirty-four subjects were involved in the analysis, but the number involved in each computation varied due to missing data. The program selected was for two-tailed test of significance, and the level of significance was set at $p<0.05$. The three individual Nyberg Caring Assessment Scales' totals were quantified with the Blaney Hobson Nursing Attitude Scale totals, for all perioperative nurses, to mathematically check for any relationships between them, and the correlational matrix demonstrated no significant relationships.

2) What are perioperative nurse's attitudes toward cost-effective practice? A frequency distribution of the total sum of the BHNAS was calculated by assigning 1 to 5 points for each answer. In order for this scoring procedure to function properly, all negatively worded questions must be reversed. Questions 3,5,7,8,10,12,13,14,17, and 18 were reversed for the SPSS computer program and then scored for a total range of 20-100 with 60 as the midpoint. Higher scores indicate a more positive attitude toward cost-effectiveness and conversely, a lower score would indicate a more negative attitude toward cost-effectiveness. The reported scores are for all perioperative nurses (ALL), the subgroup of perioperative staff nurses (SN), and the subgroup of perioperative nurse managers (NM) (Table 4). With a range of 20-100 on the BHNAS, the mean score for ALL,

(n=34,) was 69.6 with a standard deviation of 18.2; SN (n=24), scored a mean of 68.1 and a standard deviation of 17.8; and NM (n=9), had a mean score of 72.5 and a standard deviation of 20.8.

3) Is there a difference between perioperative staff nurses' and perioperative nurse managers' attitudes toward cost-effective practice? The total sample (n=34) was separated into staff (n=9) and management (n=24) and the means of the summed scores of the BHNAS was analyzed between the two groups for any significant differences. A t-test was the method chosen to test for these differences because the groups compared had homogeneity of variance and the data from this study is normally distributed. A nonparametric chi-square would also have been an appropriate test in this situation; however, it would have required the data to be split into groups on the dependent variable rather than have a range of scores. In addition, the BHNAS would need to be collapsed into categories, which perhaps changes the overall effect of the questionnaire.

A scatter plot of the data from the scales was performed and examined and no association or relationship was seen between the variables.

4) What are perioperative nurses' attitudes toward caring attributes? The Nyberg Caring Assessment Scale (NCAS) was seperated into three subject matter areas. For this research question, the NCAS that focused on personal importance of caring

attributes (#1) was totaled and scored for all perioperative nurses, n=34. All questions in the questionnaires were termed in a positive direction and have a 5-point Likert type scale.

Table 4

Summary of Distribution Frequency for Blaney/Hobson Nursing Attitude Scale of Perioperative Nurses, and Sub-Sets of Perioperative Staff Nurses and Perioperative Nurse Managers.

N=34

Group	N	Std Dev	Mean
All Perioperative Nurses	34	18.2	69.6
Perioperative Staff Nurse	24	17.8	68.1
Perioperative Nurse Managers	9	20.8	72.5

The choices ranged from, 1 being not important, to 5 being extremely important. The maximum possible score was 100, the minimum was 20 and the midpoint was 60. Scores below 60 suggest that caring for that particular focus is less important, scores above 60 suggest that caring for that particular focus is more important to the individual. The mean for NCAS #1 for (ALL) perioperative nurses was 82.9 and the standard deviation was computed at 7.99 (Table 5).

5) Is there a difference between perioperative staff nurses' and perioperative nurse managers' attitudes toward caring? Again, the t-test was used to measure the difference between these two groups. The mean for the Nyberg Caring Assessment Scale #1 which focused on personal importance of caring attributes was calculated from the summed scores of each questionnaire. The perioperative staff nurses' mean was 82.9 as compared to the perioperative nurse managers' mean which was 83.1. The f-value of 1.03 was not significant at the .05 level therefore, the statistical analyze of the t-test indicates there is no significant difference between the two groups.

6) Are these caring attributes perceived by perioperative nurses as a whole, perioperative staff nurses, and perioperative nurse managers, to be present in their supervisors? To answer this research question, the summed score of the NCAS #2 that

Table 5.

Summary of Distribution Frequency for Nyberg Caring Assessment Scale, #1, #2, #3 for Perioperative Nurses (All) and Sub-Set of Perioperative Staff Nurses (SN), and Perioperative Nurse Managers (NM).

Group	N	Std Dev	Mean
NCAS #1			
ALL	34	7.99	82.9
SN	24	8.10	82.9
NM	9	7.57	84.5
NCAS #2			
ALL	34	16.5	57.3
SN	24	7.3	55.6
NM	9	15.2	60.2
NCAS #3			
ALL	34	16.2	47.5
SN	24	15.9	44.6
NM	9	17.5	51.5

NCAS#1 Personal Importance. N=34
NCAS#2 Supervisor Exhibits. N=24
NCAS#3 Present in Hospital. N=9

asks the participant to rate their supervisors' displays of caring attributes as they relate to their relationships with the participants were used. The tabulations were separated into (All), Staff Nurse (SN) and Nurse Manager (NM). The mean for ALL (n=34) was 57.3 with a standard deviation of 16.5; SN (N=24), had a mean of 55.6 with a standard deviation of 17.3; and NM (n=9), mean was 60.5 with a standard deviation of 15.2 (Table 5).

7. Are these caring attributes perceived by perioperative nurses as a whole, perioperative staff nurses, and perioperative nurse managers to be more or less present in the hospital as compared to five years ago? The Nyberg Caring Assessment Scale #3, questions the participant to determine if the caring attributes identified are more or less present in the hospital setting as compared to five years ago. A frequency distribution was performed on the computation of the scale's totals through the SPSS statistical program. The perioperative nurses as a whole (ALL) had a mean of 47.3 with a standard deviation of 16.2. The perioperative staff nurses (SN) collective mean was 44.6 and the perioperative nurse managers (NM) had a mean of 51.5 (Table 5).

To summarize the large amount of information presented, the statistical analysis revealed:

1. There was no statistically significant correlation between perioperative nurses' attitudes toward caring and their attitudes toward cost-effective nursing practice.

2. Years of experience was the single demographic variable that significantly correlated with the instrument used to evaluate perioperative cost-effectiveness. Marital Status (single) was the demographic variable that correlated significantly with the instrument used to measure the nurses' perception of caring.

3. T-tests were used to measure the difference between perioperative staff nurses and perioperative nurse managers, sub-set of the perioperative nurse sample, and the statistical tests demonstrated no significant differences between the two in regard to cost-effectiveness and caring.

CHAPTER V

Discussion

The purpose of this study was to assess perioperative nurses' attitudes about economic factors in healthcare and whether these factors are perceived as correlating to the nurses' perception of his/her ability to provide human caring. The foci of exploratory studies are identification of factors related to the primary phenomenon of interest. The results of exploratory studies are often the generation of hypotheses to be tested in subsequent studies. For that reason, research questions were used in place of hypotheses. In addition, descriptive statistics were used to discuss the demographic data collected to identify other factors related to this topic and practice environment.

Sample Demographics

The survey instruments were mailed to 148 perioperative nurses and 34 participated by returning the surveys to the researcher resulting in a 23% return rate. This relatively low return rate may be due to the fact that the survey was nine pages long thus requiring more time to complete than the nurses were willing to contribute.

The 34 perioperative nurses in the sample were separated into two sub-sets, staff nurses and nurse managers. The data

analysis used for this study was on all perioperative nurses (n=34), staff nurse sub-set (n=9), and nurse managers (n=24). The sub-sets are exclusive of each other and inclusive in the perioperative nurse sample.

The perioperative nurse profile from the data collected consisted of a female whose age is between 41 and 50 years (47.1%) and is married (79.4%). The majority of the respondents possessed a diploma degree in nursing (38.2%, n=13), second only to 35% who have an associate degree in nursing (n=12). Of the total sample of 34 nurses, higher degrees such as baccalaureate and masters degree in nursing were held by only 26% (n=9) of the sample. The nursing education breakdown of Takes's study of operating room nurses (n=33), which took place in the midwest, was split almost evenly between the three degrees of BSN (10), Diploma (11), and ADN (12).

The Pearson Product Moment Correlation on the demographic variables demonstrated relationships between age and degree (p=.016), age and years of experience (p=.016), years of experience and degree (p=.042), gender and degree (p=.060), and marital status and Certified Nurse in Operating Room (CNOR) nursing (p=.047). The relationship between age and degree is characteristic of the southwestern nursing population who possess mostly diploma and associate nursing degrees and obtain

these degrees at a later age in life. The correlation of age and years of experience demonstrates internal consistency of the tool as one would expect years of experience to mirror age. The correlation between nursing degrees and years of experience can also be expected because entry level in the nursing profession ranges from two years to four years, and one obtains advanced degrees (four plus years) usually after some practical years of working.

The fact that most nurses are females and this sample contained only three males, corresponds with the correlation between gender and degree nullifying the other choice in gender.

Marital status correlated negatively (p=.047) with CNOR certification which indicated that the married individual collectively had acquired the CNOR certification less often than the single respondents of the sample. This may suggest that those nurses who are single might spend more time developing their careers while married nurses spend less time in formal educational study.

The correlation matrix also demonstrated significant relationships between the demographic variable of years of experience with the Blaney Hobson Nursing Attitude Scale (BHNAS) (p=.06) and marital status (single) with the Nyberg Caring Assessment Scale (NCAS) #1 (p=.05). The BHNAS assesses

negative or positive opinions about economic issues affecting nursing practice today and the correlation with years of experience; suggesting that the more experienced nurse has a more positive attitude toward economic factors influencing the practice environment than the less experienced nurse. These results agree with Cry's (1990) research of economics and nursing. His demographic information also states that years of experience were significantly correlated with positive attitudes toward cost-containment. This may indicate that either the experienced nurse is also more mature in life and understands about the realities of money or that this nurse has become less resistant to change. Perhaps the less experienced nurse needs more exposure during the educational process regarding economics and its influence on the healthcare environment.

Marital status (single) and the NCAS #1 that focused on the personal importance of caring attributes were negatively correlated ($p=.05$). This indicates the married population of this sample scored the personal importance of the caring attributes as being more important than the single population from the sample. Perhaps the single population from this sample viewed the caring questions as more unrealistic as opposed to the married population who answered the questions more realistically.

Research Questions

A discussion of the research questions addressed by this study follow.

1) Is there a relationship between nurses' caring attitudes and attitude of cost-effectiveness?

Nyberg (1990) investigated the effects of care and economics with a general nursing population from several hospitals in a western state. Her study suggested that economics was seen by nurses as a constraining force in health care while human care was recognized as nursing's responsibility and goal. The data analyzed for this study demonstrated no significant relationships between caring and economics. These perioperative nurses as a group ranked personal importance of caring (NCAS #1) at a mean of 82.9, indicating high importance to caring attributes. These same nurses responded to the economic survey (BHNAS) with a mean of 69.9 indicating a more positive than negative attitude toward economic issues, although not as high as they rated caring attributes. Prior to implementation of this study, this researcher conceptualized that perioperative nurses would perceive that the stresses from economic issues (low staffing, increased work load, increased technology), would decrease their ability to have opportunities to deliver caring to their patients.

This position was developed from personal experience and insight from authors such as Ray (1987) who stated that economics and the value of caring is creating a moral conflict for nurses. But according to respondents in this study, the position was not supported. This could be related to several factors. Perhaps perioperative nurses have the caring ethic ingrained in their practice and external stresses don't affect this component of nursing or this method of investigating caring attitudes in the perioperative nurse does not indicate whether these caring attitudes are implemented in practice.

2) What are perioperative nurses' attitudes toward cost-effective practice?

As stated above, perioperative nurses in this small sample of 34, responded to the BHNAS with a mean of 69.9, and a standard deviation of 18.2. The midpoint for this scale is 60, with scores above 60 depicting a more positive attitude and scores below 60 indicating a less positive attitude toward economics. The data suggested that these perioperative nurses viewed cost-effective nursing practices in a positive direction. Cry (1990) indicated from his research that nurses still regarded financial accountability as a new role and one they caused confusion and stress. In contrast, Takes's (1992) research on cost-effective practice in the surgical setting which utilized the

Blaney Hobson Nursing Attitude Scale indicated that of her sample (n=33) only 9% scored less than 60 points and collectively had a mean of 75.6, suggesting that these nurses favor the concept of cost-effective practice.

Although the mean (69.9) from this survey (n=34) was close to Takes' (n=33) survey mean (75.6), it would be expected that they would have been closer since the sample population was so similar. Evaluation of the demographic data between Takes' study and this one revealed that nursing education and years of experience differed. Takes' sample had increased number of baccalaureate degrees while this research study had respondents with more years of experience. Another difference in the sample population was geographic location, midwest versus the southwest. All other data was very similar. Examination of the frequency distribution of each question as compared to Takes's results showed slightly lower scores to each question which accounts for the lower total score, no questions differed significantly. The summarized sample scores from each sample differed in the respect that Takes' group had significantly fewer respondents score less than 60 points, (9%) versus (27%) for this research group. This suggests that Takes's sample had fewer participants that strongly disagreed with the issues of cost-effective practice as opposed to this researchers' results. This

variance may be due to the differences in educational background, location or years of experience.

3) Is there a difference between perioperative staff nurses' and perioperative nurse managers' attitudes toward cost-effective practice.

A t-test was performed to assess for a significant difference between the two groups and it was demonstrated there was no difference. The perioperative nurse managers (n=9) scored collectively slightly higher than the perioperative staff nurses (n=24). These results were not surprising since the nature of the nurse manager's position would be expected to be more positive toward economic issues. What would be interesting to discover is what factors are responsible for this positive attitude since most management positions in nursing are not prefaced by formal management training. Is it simply years of experience or educational background? From the respondents' educational breakdown (degree) it is shown that nurses managers possessed one MSN degree, no BSN degrees, and four each of AD and diploma, as contrasted to the staff nurse sample which had one MSN degree, seven each of associate and baccalaureate degrees, and nine diploma degrees. Formal educational preparation, while perhaps not focused on the subject of economics, may prepare the staff nurses that are promoted to

management to search out educational methods, themselves, to prepare for their new responsibilities. It is difficult to draw a conclusion from this small sample, but future studies might investigate these factors.

4) What are perioperative nurses' attitudes toward caring attributes?

Perioperative nurses as a group rated personal importance of the Nyberg Caring Assessment Scale caring attributes as very important as indicated by a mean of 82.9 and a standard deviation of 7.9. The range of scores was between 70 and 100 for this sample, no respondents rated caring attributes lower than the midpoint of the scale which is set at 60. These results can be interpreted several ways. A basic assumption about nursing made by nursing theorists, who view caring as a human trait, an essential way of being (Morse, Bottorff, Neander, and Solberg,1991), is that those individuals that make up the profession already rank caring attributes relatively high, therefore, these results are not really surprising. To look at these results from Watson's (1985) perspective, caring in nursing is not an emotion or attitude, but rather a intersubjective human response to health-illness conditions seen as a state of being, therefore, perhaps these nurses in this sample are answering the survey, not from a nurse's perspective but rather from their

perspective. Another perspective that might be possible is that the scale questions the participants about caring attributes and their importance, but the scale doesn't assess whether these caring attributes are used in their own nursing practice. The assumption would be that if they are important, they would be used, but to make this conclusion the study would need a component added that measured actual caring behaviors and perhaps perceptions from patients.

5) Is there a difference between perioperative staff nurses' and perioperative nurse managers' attitudes toward caring?

A t-test was done to assess for differences between the two groups and using a significance level of .05 there was no significant difference between staff nurses and nurse managers in respect to the way they felt about caring attributes.

6) Are these caring attributes perceived by perioperative nurses as a whole, perioperative staff nurses, and perioperative nurse managers, to be present in their supervisors?

Perioperative nurses as a whole felt that their supervisors exhibited caring attributes less often. The mean score on the NCAS was 57.3 with 60 as the midpoint of the scale. This mean score is slightly lower than the mean score for Nyberg's (1990) study. She concluded that nurses believed supervisors enact

caring less than the nurses themselves and the large variance resulted from the nurses ranking the supervisors high and low. This corresponds to the data from this study which had responses for every choice offered. Of course this sample must be viewed with the proper context, since the whole group contains the sub-sets of staff and management. Originally it was planned to discard participants that were management based, but because the sample was so small and 30% were managers, it seemed appropriate to compare the two groups to assess for significant differences. Again, a test was performed on the data with a level of significance set at the .05. No significant difference was demonstrated between nurse mangers and staff nurses regarding supervisor caring behaviors. This would suggest that nurse managers and staff nurses are dealing with the same issues with their superiors. Nyberg (1993) stresses that the economic pressures that are currently dominating the healthcare environment makes it difficult to mix the bureaucratic goals of the nurse manager with the professional goals of the nurse. This tends to leave the nursing staff confused and frustrated with the administrative portion of nursing. Nurse managers play a crucial role in development and retention of staff. Gaut (1993) states that the literature is beginning to support humanistic and or caring administrators as indicators of staff nurse retention.

7) Are these caring attributes perceived by perioperative nurses as a whole, perioperative staff nurses, and perioperative nurse managers to be more or less present in the hospital as compared to five years ago?

Of the three Nyberg Caring Assessment Scales, (#3), this one scored the lowest. The mean for perioperative nurses as a whole was 47.5, with nurse managers scoring a mean of 51.5 and staff nurses scoring a mean of 44.6. From these results, it appears that nurse managers have not perceived as much of a change in the hospital environment in regard to caring as the staff nurse has. The fact that management might have a greater voice in the hospital and more control over their environment might account for this slight difference in means; although this difference is not significant as demonstrated by the t-test.

These results do not correspond with the Nyberg (1990) study's conclusion. Accordingly, the mean of the NCAS #3 was the lowest in relation to the other scales, but the nurses' results indicated that they believed caring was similar to five years ago. Perhaps this discrepancy can be examined by citing Ray's (1989) study on bureaucratic caring. She states that the meaning of caring was markedly influenced by the role and position a person held within the organization. In other words, for perioperative nurses, caring in the hospital environment seems to be less than five years ago, but that opinion might change depending on the

other occupations people held who were questioned within the hospital environment. What would be interesting would be the exploration of those factors that contribute to this negative attitude.

Summary

The surgery department is under extreme pressure from hospital administrators and reimbursement organizations to work effectively and efficiently because of the scarce resources available and the revenue produced. Perioperative nurses are required to define themselves in economic and accounting terms in the surgical health care system. On the other hand, they are confronted with the need to preserve the humanity of patients through human caring activities (Ray, 1987).

This study was initiated to explore relationships between the nurse's perceptions of their ability to perform patient care activities and the increasing focus of economics facing perioperative nurses today. Previous research has shown that while nurses are aware of increased emphasis on the economics of healthcare, they do believe these economic pressures make human care/caring harder to provide. Campbell's (1985) study of perioperative nurses agreed that costs and time constraints imposed on them hamper the nursing team performance thus directly affecting patient care. Cry's (1990) research study of critical care nurses' attitudes toward cost-containment suggests

that while nurses are cautious about undertaking financial accountability as part of their nursing practice, with appropriate education nurses were prepared to work in a cost-efficient manner.

This study demonstrated that perioperative nurses feel strongly about caring issues in their own personal practice and seem to resent that caring is not displayed within their environment. This supports Watson's Model of Human Care theory in perioperative nurses as this data suggests that these nurses view caring as Watson does; grounded in a set of universal human values such as kindness, concern, and love of self and others. The findings of this study, although limited in generability, also validate Dr. Watson's 10 carative factors. This validation suggests that perioperative nursing, while technically challenging at times, continues to displays a dimension of caring consistent with a recognized caring model. These humanistic values become a part of one's philosophy and approach to life, and when viewed this way, caring becomes not a conscious act conveyed only in actions, but rather a moral virtue.

These same perioperative nurses also related they believe the caring environment in the hospital had deteriorated as compared to five years ago. This agrees with MacPherson's (1989) investigation of the healthcare environment as one that penalizes nurses for trying to implement a caring ethic into their

practice. Furthermore, an environment that attempts to harness nursing care as a means to increase corporate profits. The data revealed that perioperative nurses, both staff nurses and nurse managers, felt that during interactions with administration, supervisors exhibited caring attributes only sometimes and this was considerably lower than perioperative nurses thought caring behaviors should be exhibited. Future research may want to add open ended questions, in a qualitative study format, in an effort to identify factors that the nurses believe contribute to the changes in hospital and supervisor caring traits.

This study also demonstrated, and duplicated similar results of a previous study using this same tool, that perioperative nurses had relatively positive attitudes toward cost-effective nursing practice. The results from the evaluation of Blaney Hobson Nursing Attitude Scale also suggested that quality versus cost-effectiveness did not appear to be a major problem and nurses agreed that cost-effective practice could improve the status of the nursing profession.

The dependent variables, caring and cost-effectiveness, did not demonstrate any statistically significant relationships. One could say that this sample of perioperative nurses believed that caring attributes, as they related to personal importance, the hospital environment and their supervisors, were important. Cost-effectiveness in their nursing practice was also seen as

important, but there was no statistical relationship established between cost-effective nursing practice and caring.

Limitations

The major weakness of descriptive correlational research is that cause and effect relationships cannot be established. While one can examine the extent to which the variables are related, no conclusions can be drawn regarding a causal or circumstantial relationship. The results of the questionnaires about caring and economics can only be interpreted either negatively or positively and their relationships defined, but unknown variables cannot be discounted as contributing to their expressed relationship.

Another limitation of the study involved the sampling technique. The subjects were identified through the AORN local chapter and State Board of Nursing registries which limited the sample to one geographic area, consequently there was no randomization of the sample. In addition, the registries did not classify nursing positions and surveys were sent, unknowingly, to both staff nurses and nurse managers. Unfortunately, the low response rate did not allow discarding the nurse manager participants. The small size of the sample must also be considered a limitation for the interpretation of the results.

Another limitation of this study was the length of the nine page survey. This may have been a factor in the low response rate

and perhaps in duplicating this study, a technique such as personally distributing the surveys and waiting for their return might increase the response rate and therefore the strength of the results.

The information the surveys were designed to obtain is valuable for insight into the subject of caring, but the Nyberg Caring Assessment Scale really focuses on three aspects of caring, personal importance, exhibits of supervisor caring attributes, and changes in caring attributes in the hospital environment. This assessment of caring, in regard to perioperative nursing, could be measured from the NCAS #1, personal importance. This change would decrease the information about the caring facets and would narrow the focus, but would also shorten the survey by two pages.

Implications for Nursing

As a result of this study, several implications for nursing can be illustrated. First, this study helped to strengthen previous studies validity and reliability of the experienced Blaney Hobson Nursing Attitude Scale and the relatively untested Nyberg Caring Assessment Scale. Studies that have researched this particular focus of nursing have added additional elements to the study such as observation of practices which might be beneficial in gauging the importance of the results. It is evident that perioperative nurses believe in caring; but even more importantly; (1) are these

caring attributes observable in practice and; (2) what are the factors that influence the delivery of that care.

Secondly, an implication for nurse administrators is that perioperative nurses, both staff nurses and nurse managers, indicated that in their interactions with nursing administration, supervisors exhibited few caring attributes. The implication of this study appears to be that an exploration of methods for teaching caring attributes and caring behaviors in the practice setting is needed. Nursing administrators are positioned within the nursing organization to be able to influence caring attitudes with staff; therefore, this could be viewed as an opportunity for nurse managers to change their focus from one of power to empowerment, as colleague and advocate. In addition, the perioperative nurses' attitude toward his/her supervisor may directly affect perception of how positive or negative caring is viewed in the hospital environment.

Another nursing implication is directed at nurse educators and developers of nursing curricula. Although the nurses in this sample had relatively positive attitudes toward cost-effective practice, the literature suggests that many nurses are ill-prepared and uncomfortable with the subject of economics. In examining the data from this study, possible considerations as to the differing results from the literature are discussed. The standard deviation of 18.2, for the perioperative nurses group's

scores of the BHNAS, is relatively large, which may suggests that the attitudes could have been scored either more negatively or positively. These results would have changed the focus of the discussion considerably. Another consideration for the differing results may have been the low response rate. The sample of 34 perioperative nurses, which 10 of those nurses were in management, may have skewed the results from one direction or the other.

Addressing the literature that does suggest that nurses are ill-prepared in financial aspects of healthcare may suggest that healthcare economics in some capacity should be offered along with other nursing core classes. In Nyberg's (1990) discussion of Ray's theory of bureaucratic caring, she states that tending to economics is a form of caring, in that it secures the organization's ability to support human care as it is expressed by nurses to patients.

Recommendations

Recommendations as a result of this study can begin with duplication of the study utilizing a randomized sample with a larger variability of demographic characteristics of perioperative nurses. This would allow for greater generalization of the findings as well as gathering more data on the differences and similarities between staff nurses and nurse managers.

To validate the research tools, further studies that utilize these techniques to measure caring and cost-effectiveness would be recommended. In addition, development of an instrument to measure actual, caring activities, irrespective of attitude toward caring, would be useful in further studies of this subject.

The literature review revealed a paucity of current information of this particular subject matter, economic focus and caring, especially within the perioperative realm. It would be beneficial to further investigate the link between caring and economics, in an effort to identify relevant factors.

A missing component of a research study such as this is to investigate the outcome of caring attitudes and behaviors from the patient's perspective and compare the data. Evaluation of the outcome of specific caring behaviors would help to enhance the relevance of perioperative nursing. Takes's (1992) study doubly investigated attitudes of cost-effectiveness with actual cost-effective behaviors (experimental and control group were significantly different). This research design is useful for determining whether opinions and attitudes are displayed in actual practice, and in turn, would further add empirical knowledge about caring.

The study demonstrated that hospital and supervisor caring scores were significantly lower than personal importance caring scores. This translates into the sample believing the hospital

environment and caring attributes of their supervisors were less than satisfactorily. Perhaps there are specific organizational aspects that prevent caring to reach its highest potential in everyday work. Future research may want to add open ended questions in an effort to identify factors that the nurses believe have contributed to the changes in hospital and supervisor caring traits.

Appendix A. Request for Permission To Use NCAS Instrument and NCAS Instrument

October 21, 1994

Jan Nyberg, RN, Ph.D.
7716 Rogers St.
Golden, Colorado 80403

Dear Dr. Nyberg:

I am formally requesting your permission to use your tool, the Nyberg Caring Assessment Scale, for a study I am proposing to do in the spring of 1995. I am investigating the relationship between economic issues and the delivery of "Human Caring" in the perioperative setting.

I am currently enrolled as a student in the Masters of Science in Nursing program at the University of Las Vegas, Nevada, and this research will be for my thesis which is titled "What is the relationship between attitudes towards economic issues and human caring in the perioperative setting? I am a practicing nurse in the area of managed care, so this topic matter is an area of great importance to me.

I will also be using the Blaney/Hobson Nursing Attitude Scale, to measure perioperative nurses' attitudes towards cost-effectiveness in clinical practice. I believe both yours and the BHNAS instruments will be the most effective means to acquire the data I need for my study. I will be mailing both the questionnaires and a demographic survey sheet to my sample population, along with an information letter and will wait for the data to be returned to me.

I would be willing to send you a summary of my results if you so desire. If you have any suggestions, questions or comments, please contact me at your earliest convenience.

Your signature on this request letter will indicate your approval of my use of your tool, and I would certainly appreciate it if you could return it as soon as possible.

Sincerely,

Candice King, RN, BSN.

I, Dr. Nyberg, approve of the use of my instrument, the Nyberg Caring Assessment Scale, for use in the research being done by Candice King,RN. _____

NYBERG CARING ASSESSMENT SCALE

Are these caring attributes important to you?
Are they present in the most caring people you know?
Do they?
DIRECTIONS: Circle and fill in below the number which indicates the degree of your agreement with each of the following:

Extremely important 5
Very important 4
Somewhat important 3
Slightly important 2
Not important 1

1. Have deep respect for the needs of others.					
2. Not give up hope for others.					
3. Remain sensitive to the needs of others.					
4. Communicate a helping, trusting attitude toward others.					
5. Express positive and negative feelings.					
6. Solve problems creatively.					
7. Understand spiritual forces contribute to human care.					
8. Consider relationships before rules.					
9. Base decisions on what is best for the people involved.					
10. Understand thoroughly what situations mean to people.					
11. Go beyond the superficial to know people well.					
12. Implement skills and techniques well.					
13. Choose tactics that will accomplish goals.					
14. Give full consideration to situational factors.					
15. Focus on helping others to grow.					
16. Take time for personal needs and growth.					
17. Allow time for caring opportunities.					
18. Remain committed to a continuing relationship.					
19. Listen carefully and is open to feedback.					
20. Believe that others have potential which can be achieved.					

NYBERG CARING ASSESSMENT SCALE

Are these caring attributes exhibited by your supervisor in her relations with you?

Does he/she:

Always used by supervisor 5
Used frequently by supervisor 4
Sometimes used by supervisor 3
Occasionally used by supervisor 2
Supervisor never uses 1

1. Have deep respect for the needs of others.					
2. Not give up hope for others.					
3. Remain sensitive to the needs of others.					
4. Communicate a helping, trusting attitude toward others.					
5. Express positive and negative feelings.					
6. Solve problems creatively.					
7. Understand spiritual forces contribute to human care.					
8. Consider relationships before rules.					
9. Base decisions on what is best for the people involved.					
10. Understand thoroughly what situations mean to people.					
11. Go beyond the superficial to know people well.					
12. Implement skills and techniques well.					
13. Choose tactics that will accomplish goals.					
14. Give full consideration to situational factors.					
15. Focus on helping others to grow.					
16. Take time for personal needs and growth.					
17. Allow time for caring opportunities.					
18. Remain committed to a continuing relationship.					
19. Listen carefully and is open to feedback.					
20. Believe that others have potential which can be achieved.					

NYBERG CARING ASSESSMENT SCALE

In general, are these caring attributes more or less present in the hospital now than they were 5 years ago?
Is your environment more or less caring?

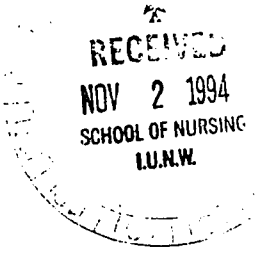
Much better than 5 years ago 5
Better than 5 years ago 4
About the same 3
Somewhat worse than 5 years ago 2
Much worse than 5 years ago 1

1. Has deep respect for the needs of others.					
2. Doesn't give up hope for others.					
3. Is sensitive to the needs of others.					
4. Communicates a helping, trusting attitude toward others.					
5. Expresses positive and negative feelings.					
6. Solves problems creatively.					
7. Understands spiritual forces contribute to human care.					
8. Considers relationships before rules.					
9. Bases decisions on what is best for the people involved.					
10. Understands thoroughly what situations mean to people.					
11. Will go beyond the superficial to know people well.					
12. Implements skills and techniques well.					
13. Chooses tactics that will accomplish goals.					
14. Give full consideration to situational factors.					
15. Focuses on helping others to grow.					
16. Takes time for personal needs and growth.					
17. Allows time for caring opportunities.					
18. Is committed to a continuing relationship.					
19. Listens carefully and is open to feedback.					
20. Believes that others have potential which can be achieved.					

Appendix B. Request for Permission to Use BHNAS and BHNAS Instrument

Montevista Hospital

October 15, 1994



Ms. Doris R. Blaney, R.N., Ed.D.
Mr. Charles J. Hobson, Ph.D.
School of Nursing, Indiana University Northwest
3400 Broadway
Gary, Indiana 46408-1197

Dear Drs. Blaney and Hobson,

I am contacting you to formally ask your permission to use your Instrument: The Blaney/Hobson Nursing Attitude Scale for a study I will be initiating in Spring of 1995.

I am currently enrolled in the Masters of Science Nursing program at University of Las Vegas, Nevada and my proposed thesis is titled "What is the relationship between Attitude towards Economic issues and Human Caring in perioperative nursing practice"?

I have read your book for nurse managers on cost-effective nursing practice and have found it to be very useful in my career. I am currently working as a Managed Care Liaison at a local hospital so you can see the financial aspect of nursing is very important to me.

Research on your instrument to measure nursing attitudes has been demonstrated as possessing the required validity and reliability measurements needed and I believe it will be the most comprehensive tool to collect the data I need. I will also use the Nyberg Caring Assessment Scale to measure the caring component of my study.

5900 West Rochelle Avenue • Las Vegas, Nevada 89103 • Fax (702) 364-8183
702 364 1111

I would be happy to submit my summarized results from my study if you so desire. If you have any suggestions, questions or concerns about my request, please contact me at your earliest convenience.

Your signature on this request letter will indicate your approval of my use of your tool, and I would certainly appreciate it if you could return it to me as soon as possible.

Sincerely,

Candice King, RN, BSN

We, Dr. Doris Blaney, and Dr. Charles Hobson , approve of the use of our instrument, the Blaney/Hobson Nursing Attitude Scale, for use in the research being done by Candice King, RN. Doris K Blaney, Edd, RN FAAN

Sorry this is late. Jim mailed this December and it was just forwarded to my home.

Good luck on your research — I definitely would like a copy of the results from your study.

Keep in touch!

DB.

BLANEY/HOBSON NURSING ATTITUDE SCALE

Directions

Please respond to the following statements dealing with the issue of cost-effectiveness in nursing practices and procedures by indicating the extent to which you disagree or agree with each one. Please *circle* your response.

	Strongly Disagree	*Disagree Somewhat*	*Neither Agree Nor Disagree*	*Agree Somewhat*	*Strongly Agree*
1. The introduction and use of cost-effective practices and procedures will improve overall nursing effectiveness.	SD	D	N	A	SA
2. The introduction and use of cost-effective nursing practices and procedures will benefit me personally.	SD	D	N	A	SA
3. Operating a nursing unit in order to make a profit is wrong.	SD	D	N	A	SA
4. I look forward to the introduction and use of cost-effective practices and procedures in nursing.	SD	D	N	A	SA
5. The introduction and use of cost-effective nursing practices and procedures will result in a decrease in the quality of patient care.	SD	D	N	A	SA
6. The introduction and use of cost-effective practices and procedures will benefit the nursing profession as a whole.	SD	D	N	A	SA
7. The thought of introducing "cost-effectiveness" into nursing makes me uneasy.	SD	D	N	A	SA
8. Hospital nursing units should not be concerned with making or losing money.	SD	D	N	A	SA
9. The introduction and use of cost-effective nursing practices and procedures will benefit patients.	SD	D	N	A	SA
10. Nurses should not be obligated to provide patient care in a cost-effective manner.	SD	D	N	A	SA

Directions

Please respond to the following statements dealing with the issue of cost-effectiveness in nursing practices and procedures by indicating the extent to which you disagree or agree with each one. Please *circle* your response.

	Strongly Disagree	*Disagree Somewhat*	*Neither Agree Nor Disagree*	*Agree Somewhat*	*Strongly Agree*
11. I look forward to learning more about cost-effectiveness in nursing.	SD	D	N	A	SA
12. Cost-effectiveness goes against the basic principles of good nursing.	SD	D	N	A	SA
13. The whole idea of cost-effectiveness in nursing upsets me.	SD	D	N	A	SA
14. Cost-effectiveness is bad for nursing.	SD	D	N	A	SA
15. I feel good when I save the hospital money.	SD	D	N	A	SA
16. I welcome the new emphasis on cost-effectiveness in nursing.	SD	D	N	A	SA
17. Cost-effectiveness programs only mean more work for nurses.	SD	D	N	A	SA
18. Cost-effectiveness programs are a hassle for nurses.	SD	D	N	A	SA
19. Learning more about cost-effectiveness will help me be a better nurse.	SD	D	N	A	SA
20. I fully agree with the need to improve cost-effectiveness in nursing.	SD	D	N	A	SA

Appendix C. Consent Form

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Dear Perioperative Nurse,

You are being asked to participate in a research studytitled, "The Relationship Between Attitude Toward Economic Issues and Delivery of Human Caring in Perioperative Nursing". I am interested in the perioperative nurses' perception of caring behaviors and cost-effective nursing practice.

You have been selected to participate in this study because you are a perioperative staff nurse, practicing in a hospital setting, providing direct patient care. If you decide to participate, I will ask that you complete the attached questionnaire, which will take about 45 minutes, and return it in the stamped self-addressed return envelope by January 15. There will be no further participation requested of you. Return of the questionnaire implies your voluntary consent to participate in the study. The questionnaire concerns your opinions on various areas of nursing; therefore, if you feel uncomfortable about any part of the survey you may chose to leave it blank. To assure confidentiality, you will not be identified by name and all data will be reported as group data. The questionnaires are returned directly to the researcher.

The results of this study will be available to you for review. To receive a copy of the research results, which should

be completed May 1995, please complete the tear off portion of this letter with your name and address and send it to the following address:

Candice King, RN, BS
University of Nevada
Department of Nursing
4505 So. Maryland Pkwy
Las Vegas, Nevada
89154-3081

Please send me a copy of the results of your study, "The Relationship Between Attitude Toward Economic Issues and Delivery of Human Caring in Perioperative Nursing".

NAME:
ADDRESS:

Appendix D. Demographic Information Sheet

INSTRUCTIONS: Please complete the following survey sheets.
Page 1: Demographics
Pages 2,3,4.: Three Nyberg Caring Assessment Scales. NOTE, THESE SCALES LOOK SIMILAR, BUT THEY ARE ASKING THREE DIFFERENT QUESTIONS.
Page 5,6,7, &8: Blaney/Hobson Nursing Attitude Scale.

1.Perioperative Nurse Demographic Data

Please check the appropriate response.

1. AGE
   - Under 21_____
   - 21-30_____
   - 31-40_____
   - 41-50_____
   - 51-60_____
   - Over 61_____

2. GENDER
   - Male_____
   - Female_____

3. MARITAL STATUS
   - YES_____
   - NO_____

4. TYPE OF NURSING DEGREE.
   - AD_____
   - BSN_____
   - MSN_____
   - Ph.D_____
   - Diploma_____
   - Other_____

5. YEARS OF PERIOPERATIVE NURSING.
   - 0-5_____
   - 6-10_____
   - 11-20_____
   - 21-30_____
   - 31 and over_____

6. CURRENT PRIMARY NURSING POSITION.
   - Full time staff RN_____
   - Full time management_____
   - Other_____

7. PREVIOUS NURSING POSITION.
   - Full Time staff RN_____
   - Full time management_____
   - More than part time management_____
   - Central processing/materials_____
   - Education_____

8. CNOR CERTIFICATION
   - Yes_____
   - No_____

Appendix E. Human Subject Rights

RESEARCH ABSTRACT

DESCRIPTION OF STUDY TITLED: The Relationship Between Attitude Toward Economic Issues and Delivery of Human Caring in Perioperative Nursing.

1. SUBJECTS: The population for the study will be all perioperative nurses, working in a southwestern geographic area hospital setting, providing direct patient care.

The selection process will be performed by accessing the Association of Operating Room Nurses (AORN) local chapter's comprehensive roster of all perioperative nurses working in the Las Vegas area. The subject's participation is strictly voluntary and subjects will be asked to complete, and return by mail, a survey questionnaire. They will receive no monetary compensation.

2. PURPOSE, METHODS, PROCEDURES: The purpose of the study is to determine whether perioperative nurses believe they can continue to emphasize the "caring" aspect of nursing with their patients in the current environment where business and cost-efficiency is stressed. In addition, the study will also investigate whether perioperative nurses feel they are delivering

more or less "caring" than five years ago and whether these nurses feel their supervisors are portraying a "caring" approach in nursing management. This will help to determine if "caring" as an integral part of nursing is still observable in the perioperative setting.

The eligible perioperative nurses will be mailed along with a cover letter, that will explain the study in detail, a survey questionnaire, and a demographic profile. A self-addressed stamped return envelope will also be included. The return of the questionnaire will be the nurse's implied consent, as outlined in the consent/cover letter. The questionnaire and demographic profile will take about 45 minutes to complete, and once it is returned, no further participation will be requested of the subject. The questionnaire's pages will have identical control numbers to assure they remain together, but will not contain the participant's names or addresses. All data collected will be reported as group data.

3. RISKS: There are no physical, psychological, or social risks involved with participating in this research study. There will be two instruments and a demographic profile used for this data collection (samples included). The participants consent/cover letter explains that they are asked about their opinion's on various areas of nursing and may chose to not complete any parts

of the questionnaire or demographic profile with which they are uncomfortable. The consent/cover letter also mentions that all collected data will be reported as group data assuring confidentiality. The procedure, address, and date for obtaining results of the study are outlined to the participants. The completed data will be kept in a locked file cabinet and only personnel associated with the study will have access.

4. BENEFITS: Although there are no direct benefits to the perioperative nurse, the potential benefits will be the assessment of various economic factors that perioperative nurses perceive as roadblocks to providing quality care. These will assist administrators in identifying methods to integrate cost-effective behaviors within nurses' desire to provide optimal care.

5. RISK-BENEFIT RATIO:

There are no known risks to the subjects. Potential benefits to the nurse group are significant.

6. COSTS TO SUBJECTS: The funding for this study will be assumed by the researcher; therefore, there will be no costs to the participants. The time required for the questionnaire to be

completed is approximately 45 minutes, and this information is included in the participant's consent/cover letter.

7. INFORMED CONSENT: The consent/cover letter to the participants clearly states that return of the questionnaire implies consent to participate in this study. The decision to participate is completely voluntary (see attached participant consent/cover letter). The questionnaires are returned to the investigator in an enclosed self-addressed stamped envelope.

Appendix F. Human Subjects Rights Approval from UNLV

UNLV
UNIVERSITY OF NEVADA/LAS VEGAS

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DATE: January 4, 1995

TO: Candice King (NURSING)

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

RE: Status of human subject protocol entitled:
"The Relationship Between Attitude Toward Economic Issues and Delivery of Human Caring in Perioperative Nursing"
(501s1294-472)

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

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

cc: Carolyn Sabo (Nursing)

Associate Vice President for Research
4505 Maryland Parkway • Box 451046 • Las Vegas, Nevada 89154-1046
(702) 895-4240 • FAX (702) 895-4242

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