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CONGRUENCE OF PATIENTS' AND NURSES' PERCEPTIONS REGARDING THE
STRESS OF HOSPITALIZATION

THE UNIVERSITY OF ARIZONA

M.S. 1982

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CONGRUENCE OF PATIENTS' AND NURSES' PERCEPTIONS
REGARDING THE STRESS OF HOSPITALIZATION

by

Sharon Ann Chamberlain

A Thesis Submitted to the Faculty of the
COLLEGE OF NURSING
In Partial Fulfillment of the Requirements
For the Degree of
MASTER OF SCIENCE
In the Graduate College
THE UNIVERSITY OF ARIZONA

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10/1/82
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TABLE OF CONTENTS

LIST OF TABLES.....	vi
LIST OF FIGURES.....	vii
ABSTRACT.....	viii
1. INTRODUCTION.....	1
Hospitalization as a Stressful Event.....	1
Statement of the Problem.....	3
Significance of the Problem.....	4
Purpose of the Study.....	9
Summary.....	10
2. CONCEPTUAL FRAMEWORK.....	11
Relationship Between Nursing Intervention and Hospital Associated Stress.....	12
Relationship Between Hospital Associated Stress and Patient Welfare.....	17
The Concept of Congruence.....	20
3. METHODOLOGY.....	25
Design of Study.....	25
Setting and Sample.....	26
Protection of Human Subjects.....	27
Data Collection Instrument.....	27
Method of Data Collection.....	29
Analysis of Data.....	30
Operational Definitions.....	31
4. ANALYSIS OF DATA.....	33
Characteristics of the Nurse Sample.....	33
Characteristics of the Patient Sample.....	34
Comparison of Patient-Nurse Perceptions of Hospital Related Stress.....	35
Comparison of Sample Rankings with Volicer's Results.....	51
Conclusion.....	57
5. DISCUSSION OF FINDINGS,IMPLICATIONS FOR NURSING, RECOMMENDATIONS AND CONCLUSIONS.....	58
Discussion of Findings.....	58
Implications for Nursing.....	62

TABLE OF CONTENTS--Continued

Recommendations for Further Study.....67
Conclusions.....68
APPENDIX A.....70
APPENDIX B.....71
APPENDIX C.....72
APPENDIX D.....73
APPENDIX E..... 75
APPENDIX F.....76
APPENDIX G.....77
LIST OF REFERENCES.....78

LIST OF TABLES

1. Demographic Characteristics of the Nurse Sample.....	36
2. Demographic Characteristics of the Patient Sample.....	37
3. Patient Classification According to Diagnosis.....	39
4. Types of Surgical Procedures Experienced by the Patient Sample.....	40
5. Nurses'Assigned Rank of the Hospital Stress Rating Scale.....	41
6. Patients' Assigned Rank of the Hospital Stress Rating Scale.....	44
7. Comparison of Nurses' and Patients' Assigned Ranking of the Hospital Stress Rating Scale.....	47
8. Unconsensual Items Within Nurses' Assigned Ranking of the Hospital Stress Rating Scale.....	52
9. Unconsensual Items Within Patients' Assigned Ranking of the Hospital Stress Rating Scale.....	53
10. Unconsensual Ranking of Items Between Nurse and Patient Sample.....	55
11. Matrix of Kendall's Tau Results.....	56

LIST OF FIGURES

1. Hospital Stress Conceptual Framework.....13
2. Congruency Conceptual Framework.....22

ABSTRACT

An exploratory descriptive study was conducted to determine if there were any significant differences between a group of primary surgical nurses and a group of elective surgical patients with respect to perceptions of hospital stress. This research proposed that the concept of congruence between nurses' and patients' perceptions of hospital stress is inappropriately assumed in nursing.

Nineteen nurses and 20 patients were asked to rank order 49 hospital events using the Hospital Stress Rating Scale. Statistical analysis of the nurses' and patients' rankings of hospital events indicated a moderate direct association between their rankings of hospital stressors. Patients' and nurses' lacked consensus in ranking various scale items. Substantive significance of these results was addressed by considering the lack of agreement on specific items within and between sample groups.

CHAPTER 1

INTRODUCTION

The purpose of this research was to compare the perception of hospitalization stress between a group of elective surgical patients and a group of surgical nurses. This chapter gives an overview of literature on hospitalization as a stressful event and introduces the significance of the problem to be studied.

Hospitalization as a Stressful Event

Stress has become one of the most popularly addressed health problems in the last decade. Stress may be viewed as any agent which challenges man's adaptive capability. Hospitalization has been recognized as a stress producing event which happens to many individuals in their life (Volicer, et al., 1977). Entry into the hospital environment means entry into a system in which the patient generally has less control of his daily events than he does in his home environment.

Historically, hospitals were a place of refuge for the weary, ill and dying. Over the centuries, the general hospital became the prototype of a modern organization which has been described as a health hotel, school, human laboratory and a stage for treatment. Corporate survival has become essential before such an organization can even consider provision of medical care. The hospital, as a social institution, carries out the task of providing health care by adherence

to inherent rules and regulations. The social structure of the hospital has contributed to the psychosocial stress by exchanging the patient's customary social roles, favored style, and his identity for the role of passive dependency. Psychosocial stress as a result of hospitalization was recognized as early as 1965 by Leonard and Skipper. Their classic volume of articles focused on social and psychological aspects of hospitalization, rather than on illness and cure.

Other authors have suggested that the hospital environment is not unlike that of a prison. Sargent (1974) suggested that strong institutional similarities between hospitals and prisons were a result of rigid restrictions on individual movement, choice and behavior. Sargent stated that anxiety and social stress ran parallel to the patient's perception of imprisonment within the institution.

In a classic sociological work, Asylums, Goffman (1961) stated that all phases of the institutional experience were tightly scheduled. One activity at a prearranged time lead into the next, with the whole sequence of activities imposed from above by a system of explicit formal rulings and a body of officials.

In the same context, Gunn, et al. (1978) studied the relationship between prison inmates and hospital patients perceptions of authority figures within the two institutions. Prison doctors and guards were closely associated with nurses and health technicians within the health care institution. According to both groups of subjects, factors contributing to psychological stress and anxiety were primarily the power to enforce and the uniform dress of the personnel.

Psychosocial stress as a result of hospitalization has been supported throughout nursing literature (Pelietz, 1972; Roberts, 1976; Nolan, 1977; Roberts, 1978). Hospitalization, recognized as a major disorganizational event in one's routine habits, expected reactions of others, and relationships with loved ones, has been considered a psychosocial stress which requires physical and emotional adjustment (Gillis, 1980).

The conception of psychosocial stress associated with hospitalization has suggested the need for thorough patient physical and psychosocial assessment by the health care team. All patients do not respond to environmental and situational stimuli the same way. Volicer (1978) has suggested that there are differences in psychosocial stressors, as identified by medical versus surgical patients. In Volicer and Bohannon (1975) Hospital Stress Rating Scale, (Appendix D), surgical patients scored higher than medical patients on: 1) unfamiliarity with the surroundings, 2) loss of independence, and 3) threat of severe illness. There were no differences in hospitalized patients (medical or surgical) in relation to separation from others and problems with medications.

Statement of the Problem

Perception is a form of behavior which allows an individual to interact and adjust to varying demands of the environment or situation. It is known that perception is influenced by one's motives, previous learning and personality (Szilagyi, 1980). Hence, there is a

potential for differences in patient and nurse perception of events. The intent of this study was to investigate the relationship between elective surgical patients' and surgical nurses' perceptions of hospital stress on a primary care unit.

Significance of the Problem

Of all members on the health care team, the registered nurse often has the greatest contact with the hospitalized patient. The nurse is most often directly concerned with the effects of psychosocial stress on the welfare of the patient. The goal of patient-nurse interaction has been defined as assisting the patient in meeting needs he cannot meet for himself (Skipper and Leonard, 1965; Gillis, 1980; Sundeen, 1981).

Nursing and patient centered goal development requires a thorough patient assessment. Though it has been recognized that the nurse assumes a dependent role in implementation of medical care, he/she also possesses professional autonomy to include independent determination of nursing diagnoses and prescriptive care within the limitations of the nurse practice act. The nurse's ability to identify "clues" of psychosocial stress better prepares her to develop a personalized plan for patient care. A nurse who is aware of such patient perceptions possesses the capability of decreasing the duration and scope of the stressful experience, thus, promoting the integrative functions of the patient (Sundeen, 1981).

The holistic view of man and the psychosomatic approach to surgical recovery as influenced by patient psychosocial status has suggested the interdependence of physical and psychosocial aspects of convalescence (Volicer, 1973). Categories of psychosocial stress associated with the events of hospitalization include: 1) unfamiliarity with surroundings, 2) loss of independence, 3) separation from spouse, 4) financial problems, 5) isolation from other people, 6) lack of information, 7) threat of severe illness, 8) separation from family, and 9) problems with medication (Volicer et al. 1977).

A whole set of patient needs arise as a consequence of hospitalization and treatment. Wolfer (1973) has stated that the clinician must have exceptional interpersonal and intricate technical-physical skills to maximize patient comfort and enhance patient psychological welfare, recovery and adaption.

Gardner (1981) has raised critical questions requiring study of whether or not there is a difference between nurses' perceptions of offering psychosocial support and patient perceptions of needing such support. The question of congruence between nurse-patient perceptions of support behaviors remains unanswered. Nursing literature has viewed support as an activity provided within the context of the nurse-patient relationship and thought to be dependent upon the communication skills of the nurse. Support definitions have varied between nurse specialists regarding nurse values, nurse perceptions of patient needs and values and the environment surrounding both the patient and nurse at that particular time.

In Gardner's descriptive study, surgical nurses most often agreed on the following physical and psychosocial behaviors for care of surgical patients: 1) helping the patient cope with feelings, 2) giving information, 3) doing specific physical comfort measures, 4) coordinating care needs, and 5) touching the patient. Nurses across all specialties felt the most important words associated with nursing support of patients were listening, expressions of feelings, participation in decision making, trust, rapport, empathy, concern, feedback and planning care. In relation to this, Horowitz (1976) has supported the importance of the clinician's clear understanding of patient perceptions of stressful events and the patient's cognitive style before focusing on effective stress relief measures.

When verbal and nonverbal messages occur the literal content and the metacommunication, all say essentially the same thing, the term congruence may be applied. Factors considered to influence communication have been broadly categorized by Sundeen (1981) as: 1) the pattern organization (uniqueness of an individual), 2) relationship between the sender and receiver (patient and nurse), 3) purpose or reason for the communication (stated or unstated), and 4) content or message being sent (choice of words, actions, congruency of verbal or nonverbal levels), and 5) time of communication. These factors influence the communication link between both patient and nurse, and emphasize the need for congruence in perception of a given situation. Congruence, as an essential pattern in communication, is necessary to provide effective psychosocial support to a patient.

The significance of congruence in communication has been demonstrated by Meyers (1964) who reviewed communication with clients in a hospital setting. An important research finding was that over one third of the clients forgot what they were told. Evidence of perceptual distortion between what was meant and actually heard was influenced by the level of anxiety the patient experienced. This has suggested the importance of the nurses' application of therapeutic communication techniques, (i.e. reflection, clarification, consensual validation) prior to determining nursing interventions.

Skipper (1965) has supported several hypotheses regarding communication with hospitalized patients and the effectiveness of patient care. Hypothesis XI stated "The greater the patient's fear and anxiety about the nature of his illness, the greater the possibility that his fear and anxiety will not be reduced when such information is not communicated to him."

A situation in which the patients are anxious and fearful over not knowing what is wrong with them may lead to serious misconceptions about patients on the part of hospital personnel. This potentiates a self perpetuating process and may lead to confusion, increase perceptual distortion and cause deterioration of the patient's condition.

Skipper's hypothesis XII stated "the less communication between the patient and hospital functionaries, the greater the probability that the functionaries will base their actions on misperceptions of the

needs of their patients." (Skipper, 1965). The significance of nurse-patient congruence of perceptions of hospitalization and illness has been defined by patients themselves. Skipper stated that the health care professional's failure to take the patient's view into account was one of the major potential sources of breakdown in staff-patient communication. Defining the situation from the patient's point of view to determine congruence between patient and nurse perceptions is essential before any nursing action should be implemented. In his study of 60 nurse-patient contacts, the importance of communication techniques to assure congruence in perceptions was demonstrated. Patients in the study did not adequately communicate their needs for nursing care as the nurse initially approached them. Seventy-eight percent expressed no aspect of their needs clearly in their presenting behaviors. Of the 11 (18 percent) who did express needs in part, an interesting phenomenon consistently occurred, Each of the patients initially requested physical assistance (i.e. use of bedpan, change in position or beverage request, etc.). As those needs were met, other needs emerged. The patients tended to move from expressing needs which required concrete assistance to the expression of emotional needs. Patients, confused and apprehensive about their present condition or situation to the point of experiencing severe emotional tension, initiated communication with a relatively minor request for assistance. This study has suggested that physical and psychosocial stressors may leave the patient unable to assess his situation realistically. The nurse requires considerable assessment and communication skills to respond to verbal and nonverbal behavior

before the immediate source of distress can be identified and the specific means to alleviate it can be provided.

Gersten (1976) has supported the hypothesis that nurses play a pivotal role in implementation of medical treatment and patient interaction. Patients were asked to rate their satisfaction with physical and psychosocial care. While 86 percent of the patients were satisfied with the technical aspects of their physical care, they also felt nurses did not pick up on their fear and anxiety or their need for a better inter-personal relationship. Thirty-four percent of the patients surveyed stated they experienced emotional trauma during hospitalization and felt the staff effort to reduce the trauma as a result of their hospitalization and illness was incomplete.

Purpose of the Study

The purpose of this study was to determine if there are any significant differences between a group of primary surgical nurses and a group of elective surgical patients with respect to perceptions of the stress of hospitalization. In the early development of the Hospitalization Stress Rating Scale (Volicer, 1973) nurses were a subgroup of health care providers who ranked hospitalization experience as stressors. Health care and non-health care occupations demonstrated no difference of ratings; however, specific studies to compare congruency between a group of surgical patients' and a group of primary care nurses' perceptions of hospitalization stress were not found in the literature.

Summary

This chapter has described an overview of the literature supporting hospitalization as a stressful event. The social structure of the organization and the patient's alteration in locus of control can further contribute to the stress of the experience. Psychosocial stressors as a result of this experience require physical and emotional adjustment. The nurses' ability to regulate the environmental demands requires initial patient-nurse collaboration to validate perceived patient needs. This research looks more closely at the congruence of patients' and nurses' perceptions of patient needs.

CHAPTER 2

CONCEPTUAL FRAMEWORK

In theory and conceptual model development, it has been recognized that basic assumptions may exist. One basic assumption in the proposed conceptual framework is that man is an "open system" responding to stimuli in his environment. Man is not a passive creature who merely receives stimuli. Instead, "he creates the world through such processes as learning, perception, cognition and language " (Roberts, 1976). Man, as an open system, responds to his environment in a way that will balance psychological, behavioral and emotional energy as he strives towards equilibrium - a necessity for life. The ideation of man as a biopsychosocial being in constant interaction with his environment has been supported by Roy (1980). The interaction between man and environment in exchanging energies has also been recognized by Chinn, 1974; Putt, 1976; Rogers, 1980; and Neuman, 1980.

Hospitalization has been supported in the literature as a psychosocial stressor which occurs either directly or indirectly in the lives of most people. Aside from the physical stress of illness itself, hospitalization leads to many changes in daily life and concerns of the individual that result in psychosocial stress (Volicer, 1978).

The stress state has been considered an organism and environmental action. It is not purely an emotional state, but is a particular kind of reaction of man (organism) to environmental events. The occurrence of environmental changes may be perceived as a threat to self

in some individuals (Lazarus, 1966). Lazarus suggested that basic to the cognitive view of emotions is the assumption that one's cognitive processes evaluate a stimulus, interpret its meaning and determine its significance. Monat and Lazarus (1977) have proposed that "... the intensity of the environmental stimulation (broadly conceived) is curvilinearly related to the degree of felt stress and to the degree of effectiveness in subsequent coping and performance" (Monat and Lazarus, 1977).

Most nurse researchers who investigate the reduction of hospital stress use the model shown in Figure 1 on page 11 to guide their studies. This model describes a negative correlation between the concepts of nursing intervention and hospital associated stress. For example, as the nurse offers pre-operative information, the patient's state of anxiety is reduced. The model also describes the negative correlation between hospital associated stress and patient welfare. For example, as anxiety is reduced, the patient is able to sleep better on the pre-operative night. The following sections shall address each of the relationships shown in Figure 1.

Relationship Between Nursing Intervention and Hospital Associated Stress

The relationship between nursing intervention and hospital associated stress has been demonstrated across a variety of patient populations. In an early experiment, Dumas (1963) hypothesized that psychological preparation of surgical patients by a nurse would reduce the incidence of post-operative vomiting. Experimental studies of 83

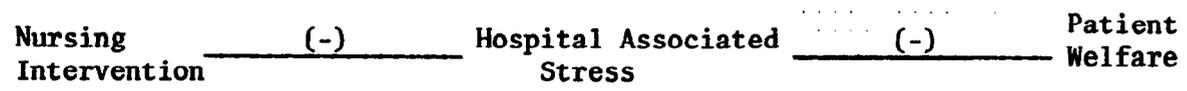


Figure 1: Hospital Stress Conceptual Framework

gynecological patients demonstrated that patients whose distress was not relieved by psychosocial support tended to vomit more than those whose distress was relieved.

Wolfer and Visintainer (1975) demonstrated that children who received pre-operative psychological preparation and continued emotional support experienced: 1) greater ease in fluid intake post-operatively, 3) significantly lowered heart rates, 4) reduced resistance to induction, and 5) significantly lower hospitalization stress scores. In a similar study, Sime (1976) demonstrated a linear relationship between patient pre-operative fear levels and recovery. Patients who received pre-operative information had lower pre-operative fear levels and a more favorable recovery. Johnson et al. (1975) supported the hypothesis that preparatory messages which describe anticipated sensations would reduce distress during a procedure for results very similar to the Sime (1976) study.

In addition, Brockway (1976) further supported the relationship between nursing intervention and psychosocial stress. The Brockway study found that patients who received knowledgeable reassurance when asked to consider aspects of hospitalization, had reduced anxiety and vocal stress.

In a similar study, Toth (1980) recognized the relationship between anxiety and information. Anxiety levels of coronary care unit (CCU) patients who received structured pre-transfer (from CCU) instruction demonstrated significantly lower anxiety levels than patients in the control groups.

Several other studies which indicate that the nurse is effective in helping patients cope with feelings have been noted. Krueger (1977) demonstrated that nurse's ability to perceive patient concerns regarding sexual adjustment after hysterectomy reduced patient anxiety about future sexual relationships. Furgall (1981) demonstrated the effectiveness of nursing intervention in reducing fear, anxiety and uncertainty associated with illness and hospitalization in children with varying degrees of cardiac disease and in their parents. Pediatric clinical nurse specialist interventions not only reduced fear, anxiety and uncertainty in the subjects of this exploratory-descriptive study, but also increased trust, and confidence.

Williams (1979) supported the importance of empathy as a major catalyst in upgrading the psychosocial nursing care for people of all ages, regardless of health care setting. Of occupants in a nursing home (N=73), Williams demonstrated that the more empathetic the nurse, the stronger the probability of enhancing the individuals self concept. For individuals who suffer a depersonalizing existence in an institution, the high empathetic stance of the nurse is the "most precious gift" of self they can provide toward abolishing the negative effects of the institutional experience.

Shuster (1973) described patient perceptions of threat to self as a result of his inability to make sense out of what was happening to or around him, or when input was lacking, untimely or not understood. Nurse interaction to provide information increased sense of self worth and general well being.

The experiences of loneliness and isolation in hospitalization involve three components according to Roberts (1976): 1) separateness from contact with significant others in one's life, 2) separateness from the body, and 3) separateness from one's values and ideas. The effectiveness of nursing intervention to foster physical and psychological relatedness has been described by Skipper (1965), Roberts (1976), and Roberts (1978). Nursing research has described the significant effect of touch in minimizing feelings of isolation and anxiety; and in fostering patient perceptions of self worth and values as a human being (Weiss, 1979; Krieger, 1973; McCorkel, 1974; Tobiason, 1981). The effects of touch in favorably altering patient heart rate, heart rhythm, and frequency of ectopy have been noted in the literature (Lynch, et al., 1974a; Lynch et al., 1974b; Mills, 1976; and Krieger, 1979). Heidt (1980) found that patients who received intervention by therapeutic touch demonstrated a significantly greater reduction in post test anxiety scores.

The positive impact of social supportive nursing interventions and emotional support (as a rubric of social support) on patient adaptation and well being has been addressed by Miraveski et al. (1978). Nurses have defined support as being mainly in the area of emotional support or the reduction of emotional stress. Social support has been considered one of the variables which may influence an individual's susceptibility to disease and responses to treatment. Gardner (1979) emphasized the importance of social support by hypothesizing that a social communication

(usually coordinated by the primary health care taker) acts as a buffer against disease and ultimately in maintaining a patient's effectiveness and physical and psychological integrity. The relationship between appropriateness of nursing intervention (most often emotional support) and psychosocial stress has been addressed in nursing literature (Michaels, 1964; Ginsburg and Clark, 1972; González, 1973; Egbert, et al., 1974; Gruen, 1975; Rickel, 1976; and Tully and Warden, 1978).

The very special function and skills of nurses have been labeled as "supportive," "expressive" and "person oriented" by Wooldridge (1968) and Wolfer (1973). These functions have been considered effective in minimizing psychosocial stress as a result of hospitalization. Nursing research focused on efforts to effectively reduce stress associated with hospitalization has suggested the effectiveness of nursing interventions to alter demands of the environment. Such studies have also suggested evidence of congruence between nursing perception of patient need and patient psychosocial needs, which ultimately impacts patient recovery, welfare and adjustment for the environment.

Relationship Between Hospital Associated Stress and Patient Welfare

The relationship between hospital associated stress and patient welfare has been described by medical physiologists, sociologists, psychologists, and nurses, to name a few. During hospitalization, the potential for a substantial imbalance between environmental demands may be perceived as psychosocial stress if the individual anticipates that he will be unable to cope with it without endangering other goals.

In his classic work, Lazarus (1966) stated that one cognitively appraises the demand response and either supports or negates the situation as a "threat" and a psychosocial stressor.

The response to psychosocial stress may be adaptive or maladaptive. In either instance, patient response to such stress requires energy. Energy that is required for coping with environmental and situational demands reduces available energy for resistance to disease and recovery from illness, according to Lazarus (1966), Volicer (1976), and Sundeen (1981).

A predictable physiological pattern to any physiological or psychosocial stressor was formulated by Selye (1965). His classic theory suggested that perception of any situation as stressful elicits an autonomic nervous system activation. The non-specific defense reaction to such a perception is known as the "fight or flight" response. Sympathoadrenal stimulation triggers the release of catecholamines, plasma lipids, corticosteroids, thyroid hormones and alters electrolyte balances essential for life. It has been hypothesized that neuroendocrine responses as a result of psychosocial stimuli may quantitatively alter the homeostatic balance of the body. In a surgical patient, trauma is often a result of primary etiology. Psychosocial stimuli that might potentiate the stress response may decrease resistance to the underlying disease and may complicate healing and recovery processes. Prolonged response to psychosocial stimuli may result in permanent pathogenic structural changes, at least in predisposed individuals.

This has also been supported by Kagan and Levi (1974) and Grossman (1978). These authors have reemphasized the notion that psychosocial stimuli can influence nearly all existing variables, which may in turn lead to precursors of disease, impede recovery and aggravate disability.

The relevance of psychosocial stress and illness has been noted by Holmes and Rahe (1967). The investigators have provided detailed information about total stress scores in a given period of time as predictors of illness. An extension of this view, that psychosocial stress is a precursor of illness, has been the idea that high levels of stress may lead to more serious and more prolonged illness than do low levels of stress. The control of psychosocial stress experienced by hospital patients has been considered an important factor in the process of recovery of illness.

Selye (1965) contended that although a moderate amount of stress is good for an individual, too much stress/distress would have an adverse effect on the ability of the patient to cope with and recover from illness. Writings of these two authors have been cited throughout nursing, medical and psychosocial literature. Kagan and Levi (1972) stated that prolonged stress requires so much energy for coping and adaptation that the individual's ability to resist illness is diminished and the ability to regain a state of wellness is decreased.

Both Neuman (1980) and Roy (1980) have supported the idea that psychosocial stress reduction is instrumental in fostering patient physical

and psychological welfare. Roy (1980) has suggested that nursing activities must include support and promotion of patient adaptation for patient welfare and conservation of energy; thus, energy is available for the healing process. The nurse, as an extended regulatory force to modify stimuli in the environment increases, decreases or maintains stimulation to positively influence the force of events the patient experiences. Neuman (1980) recognized Selye's definition of stress and views the nurse as a unique professional who should approach the "total person." She has suggested recognition of patient stress factors and nursing intervention aimed at reduction of those factors. Purposeful interventions aimed at reduction of stress factors and adverse conditions may affect optimal patient functioning in any given patient situation.

In a study of 26 patients who had total hip or total knee replacements, levels of dependence and interdependence varied according to the perceived stress of hospitalization and surgery. Patients who had lower levels of perceived stress demonstrated more independent behaviors post-operatively than those who perceived hospitalization events as more stressful (Derdiarian 1976). Healy (1968) found similar results in patient use of narcotics and earlier hospitalization discharge in the experimental group of patients who received psychosocial support and information during hospitalization.

The Concept of Congruence

This research proposes that a concept of congruence between

nurses' and patients' perceptions of hospital stressors, is inappropriately assumed in the framework shown in Figure 1 on page 13. The proposed model, shown in Figure 2, recognizes the importance of perception congruency in relation to both hospital associated stress and nursing intervention. As nurse-patient congruency is increased, the nurse is more likely to select the most effective nursing intervention, which will reduce hospital associated stress and ultimately enhance patient welfare.

For the purposes of this model, the unit of analysis shall be a group of nurses and a group of patients, rather than a one patient to one nurse comparison. This model makes the assumption that if the relationship exists in a one to one relationship, a group of similar surgical patients are very likely to exhibit the same relationship when cared for by a group of primary care (surgical) nurses.

Lindell (1979) described congruence in terms of matching experience, awareness, and communication. Incongruence is defined as a discrepancy between experience, awareness and communication. Congruence is a very important factor in ultimate stress reduction and patient welfare. Boettcher (1978) has stated that certain conditions must be met so the patient may adapt positively to his environment and change in health status. Of significant importance is the nurse-patient goal congruence, which is only possible with nurse-patient analysis of the situation. Mutual goals, conjointly established, promote adaptation and change from patient disequilibrium to dynamic equilibrium.

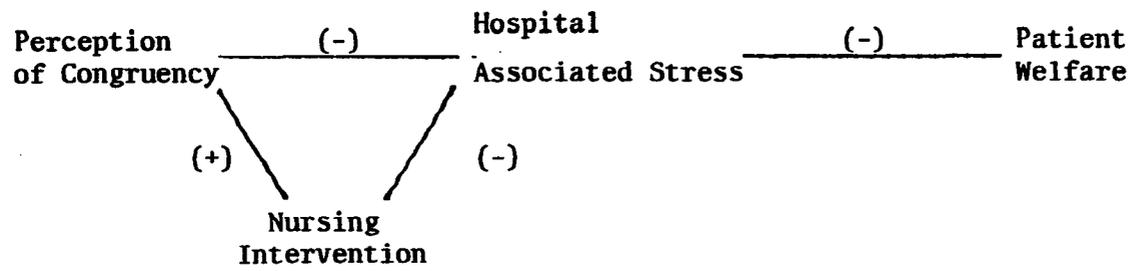


Figure 2: Congruency Conceptual Framework

Robinson (1976) has supported the idea that people admitted to a hospital not only bring an illness, but also a definitive mental set that will influence the manner in which they assume the patient role. This manner will be influenced by fantasies about the institution and professional people in it. The mechanisms individuals use to ultimately buffer themselves against anxiety and external agents can be fostered by effective interaction and intervention by health personnel.

In an early study often referred to in nursing literature (Tagliacozzo, 1962) hospitalized patients refrained from expressing fears, feelings, desires and criticisms to either the nurse or physician. Patients confirmed that more nurse reinforcement was in response to "good patient" behaviors (self control, minimal dependence, cooperation, etc.) The implications for congruence between nurse-patient perceptions of patients emphasize the importance of matching perceptual experiences. Neuman (1972) has supported this importance and emphasizes finding out from the client how he perceives or experiences his particular situation. By clarifying the clients perception, valuable data are obtained from which to optimally and appropriately plan his care. The potential for perceptual distortion and development of inappropriate interventions and care goals exists if clarification of how the patient perceives his situation does not occur. Aspinall (1974), Gersten (1976) and Roberts (1976) supported this idea, recognizing the role of the nurse and emphasized the need for nurse-patient interaction to assure congruence of perceptions and selection of the most purposeful intervention to ultimately foster patient welfare.

In support of the relationship between congruence and appropriateness of nursing intervention, Ramsden (1980) stated that the hospital stay is something like taking a trip to a foreign country and even more analagous to becoming an inmate in a prison. The ability of the patient to adapt to this new environment and progress with treatment largely depends on the health care team's ability to correctly recognize patient needs, conflicts in personal values and perceptions of the experience of hospitalization and illness. Congruence of perceptions between nurse and patient can decrease feelings of isolation etc., increase understanding and familiarity with the patient role of the hospital environment and contribute positively to patient outcomes of treatment.

In summary, the purpose of this exploratory descriptive study was to investigate the congruency concept. Though congruence of patient-nurse perception has not been demonstrated often in scientific studies, recognition of this idea in the literature emphasizes its importance in implementation of appropriate purposeful nursing interventions.

CHAPTER 3

METHODOLOGY

The following topics are addressed in this chapter: design of the study, sample, protection of human subjects, data collection instrument, method of data collection, method of data analysis, and the operational definitions for this study.

Design of Study

This was an exploratory, descriptive study designed to determine the relationship between elective surgical patients' and surgical nurses' perceptions of hospital stress in a primary care unit. Data was obtained from the nurse population and compared to data collected from the patient population to determine if there were any trends in congruency between patients and nurses perceptions of hospitalization stress.

Nursing research has not examined perceptions of hospitalization stress across a group of surgical patients and a group of primary care surgical nurses. For that reason, this exploratory-descriptive study examined this relationship on a macro(group) level, though most nursing literature approaches it on the micro (individual) level. In addition, it was not clinically feasible to obtain a sufficient number of distinct patient-nurse matched pairs during the data collection period which would have limited the power of this study.

The study was conducted in a general surgical unit of a 160 bed

acute care hospital located in the southwestern United States. The Hospital Stress Rating Scale shown in Appendix D was distributed to nurse subjects. They were requested to return it to the investigator within 24 hours. The Hospital Stress Rating Scale was distributed to patients for completion on the second or third post-operative evening.

Setting and Sample

A convenience sample of 20 surgical nurses and 20 surgical patients was selected. The group of nurses were assigned to render nursing care on an adult surgical unit, which used a modified primary care staffing methodology called total patient care. To be included in the sample nurses must have been employed by the hospital directly, worked on the surgical unit for at least three months prior to the study, and been male or female.

The group of surgical patients had undergone an abdominal or gynecological procedure. At the time of data collection, each patient had been on the surgical unit for two or three days. The following patients were omitted from the study: 1) patients who had been admitted for emergency surgery, 2) patients who had been admitted to a critical care unit post-operatively, and 3) patients who had a diagnosis of cancer or were awaiting a differential diagnosis. These groups of patients would have had very special psychosocial needs and would have been exceptionally vulnerable to the events of hospitalization. They may have been unable to appraise the events of hospitalization

as requested of the subjects in the study. Elimination of the above categories of patients allowed for a far more homogeneous sample of surgical patients. All patients who participated in the study were required to be alert, willing to participate and were able to speak and read English.

Protection of Human Subjects

The proposal was approved by the Ethical Review Committee of the University of Arizona College of Nursing, and the Director of Nursing Services at the hospital where the study was to be conducted. Only registered nurses and patients who consented to participate were included in the study. The disclaimers shown in Appendix F and Appendix G were read by each nurse and patient respectively before they were allowed to participate. The purpose of the study and the right to withdraw from the study at any time without consequences was verbally explained to each subject. Confidentiality of the information was assured by assigning a code number to each subject.

Data Collection Instrument

The instrument used in this study was developed by Volicer and Bohannon (1975). In the initial phase of instrument development, patients, lay people, physicians and nurses were interviewed about their experience of hospitalization. The sample respondents included relatively equal numbers of males and females, persons under 30 and over

30 and individuals employed in medical and non-medical professions (Volicer, 1973).

Forty-five events were identified as experiences considered stressful during hospitalization (i.e. inadequate explanation of diagnosis, not having visitors, etc.). Respondents were asked to assign a numerical score to the items using magnitude estimation. The test was then replicated using a sample of 47 general medical-surgical patients.

There was high degree of consensus among respondents in both studies regarding how events should be ranked. The correlation of mean ratings between the survey sample (N=216) and the hospital patient sample (N=47) was .88. Correlations for the test-retest reliability of these two sets of rating with regard to age, sex, medical versus surgical status, and other subgroups ranged from .71-.96, indicating a high degree of consensus about the relative stress level of items on the list.

The scale was revised as a result of respondent complaints about the numbering procedure and wording of items. Ultimately, a refined 49 item scale for numerical rating of hospital experiences of stress was developed. Sub-group (type of patient, marital status, sex, age, education, etc.) correlations using Spearman Rho correlation to evaluate the consensus about ranking of items in the high stress (25 items) were demonstrated (Volicer, 1976).

Test-retest reliability of the 49 item instrument indicated a slightly higher correlation range (.90-.96) than the range of

.71-.96 reported in the initial study. Inter-item correlation of high stress items ranged from .72-.84 in the revised scale. Inter-item correlation of high stress items ranged from .72-.84 in the revised scale. Inter-item correlation of low stress items following scale revision improved markedly, ranging from .67-.88. Thus, evidence of reliability has been demonstrated.

Content validity implies that the instrument measures what it is intended to measure, on both rational and empirical sources (Rezler, 1978). Content validity of the Hospital Stress Rating Scale has been established through careful development and refinement by experts in the field of psychosocial concepts.

Method of Data Collection

The 49 items on the Hospital Stress Rating Scale were used by patients and nurses to rank order events related to the experience of hospitalization. Respondents were asked to rank the events from least stressful to most stressful. Each subject was given 49 randomly ordered cards. Each card described an event associated with hospitalization. Subjects were instructed to separate cards into three groups: 1) most stressful, 2) somewhat stressful, and 3) least stressful. Subjects were then asked to rank order the events in each group from least stressful to most stressful. Following subject completion of these ranks, the investigator consolidated the three card groups from least stressful to most stressful for data analysis.

Patient data was collected on the third or fourth post-operative day by asking the patients to base their rankings on what they perceived to be the feelings of "any" surgical patient in general rather than their own personal feelings about this surgical experience. After patient data collection was complete, primary surgical nurses were asked to rank order the same 49 items from least to most stressful on the scale. They were asked to rank the items in the order they thought "any" surgical patient in general would perceive the events.

Demographic nurse variables collected to describe the sample were age, education, number and type of hospitalization, months of professional experience, and months of primary surgical experience on the unit under investigation. This information was obtained by nurse completion of the Nurse Disclaimer shown in Appendix F. Demographic patient variables collected were age, sex, education, number of previous hospitalizations, diagnosis and type of surgery. The diagnosis and type of surgery was obtained from the patient's medical record. It was recorded on the Patient Disclaimer Sheet shown in Appendix G.

Analysis of Data

Ordinal scaling of the hospitalization events, small sample size, and the fact that normality cannot be assumed requires comparative

study by non-parametric statistics, Analysis of data for this exploratory descriptive study was accomplished by looking at the sets of ranks using Kendall's Tau. Kendall's Tau is a measure of association intended to describe the relationship between variables. It proposes the same inferences as the coefficient of rank correlation. This statistical test provides no evidence of a causal relationship between variables (Gibbons, 1976). The correlation coefficient takes on values between -1 and +1. Stronger association is reflected by larger absolute values. Therefore, a high positive value of Tau would indicate a high degree of association between nurse-patient rankings of hospital stressors. The significance level for this analysis was set at $p < .05$.

Operational Definitions

Primary nurse. This refers to a licenced registered nurse providing total care to an elective surgical patient on the general surgical unit. The RN has worked on the surgical unit for at least three months.

Surgical Patient. This refers to an individual who was electively admitted to the hospital for scheduled surgery that requires hospitalization for three or more days and is at least 18 years old.

Total Patient Care. This falls on the continuum between team and primary nursing in relation to job design characteristics. The RN provides total patient care through direct nurse-patient interaction. Nursing interventions are aimed at anticipating and treating physical

and emotional patient needs.

Hospitalization. This refers to the admission of an individual to an acute care medical/surgical facility for medical diagnosis and/or specific medical treatment.

Congruence. This referred to the accurate matching of experience, awareness and communication. In this study, congruence was viewed from the surgical nurses' and elective surgical patients' perceptions of the stress associated with the hospital environment and its events.

CHAPTER 4

ANALYSIS OF DATA

This chapter presents the findings and statistical analysis of data collected regarding nurses' and patients' perceptions of hospital associated stress. In addition, it reviews the data in regard to statistical versus substantive significance. The subjects of this exploratory descriptive study were a convenient sample of 20 registered nurses and 20 post-operative surgical patients. The nurse sample will be described first.

Characteristics of the Nurse Sample

Twenty-one questionnaires were distributed to the nurses on the unit under study. Twenty of the 21 questionnaires were returned. One nurse who responded to the nurse questionnaire had been employed on the particular unit two months. She did not meet the sample requirements of employment for at least three months and was omitted from the study. All nurse questionnaires were distributed after completion of the patient data collection to minimize bias that may have resulted in patient-nurse discussion of the Hospital Stress Rating Scale.

The nurse sample consisted of 19 female nurses assigned to render nursing care on an adult acute surgical unit. The methodology for staffing was a modified primary care concept which utilized total patient care by a registered nurse. Though a convenience sample was

not limited by sex, all nursing respondents were female. Eighteen nurses in the sample were Caucasians, one nurse was Hispanic. Three subjects (16 percent) held the Bacalaureate degree in nursing. There were eight respondents with diplomas and eight associate degrees for 42 percent in each category.

Table 1 further describes demographic characteristics of the nurse sample. Ages of the nurse sample ranged from 21 to 57 years, with a mean age of 35.94. Nursing experience of the sample ranged from six months to 36 months. Nurses in the study were assigned to render patient care on the particular surgical unit from five to 51 months. Nurses in this study had been hospitalized from zero to seven months for medical, surgical and obstetrical reasons.

Characteristics of the Patient Sample

The patient sample consisted of a convenience sample of 20 acute elective surgical patients. Patients were approached on the second post-operative day to determine their interest in study participation. Of 23 subjects approached, twenty were willing to participate. The patients simply stated they were uninterested in participation; one patient who initially agreed to participate reconsidered after reviewing the instructions. Patient respondents were given the patient disclaimer and instructions to read on the second or third post-operative evening. Completed patient data was collected by the principal investigator on the third or fourth post-operative evening.

Fifteen of the patient respondents were women and five were men. Seventeen patients were Caucasian and one patient each of the Hispanic, Nordic and American Indian cultures were represented in this study.

The age of the patient sample ranged from 20-76 years as described in Table 2. Years of education ranged from 10 to 16 years. The mean educational level was 13.45 years. Patients in the sample had experienced in-patient hospitalization from one to 14 times. Patients were not asked reasons for previous hospitalizations.

The elective surgical patients in this study were classified into the three major diagnostic categories of 1) gynecological, 2) genitourinary, and 3) gastro-intestinal. Table 3 gives the diagnoses within each group. The major surgical approaches for patients in the study are outlined in Table 4. All surgical patients received general anesthesia. Surgical approaches for patients were abdominal, vaginal or trans-urethral. All patients in the study experienced an uncomplicated recovery and did not receive blood transfusions or special procedures during the recovery phase of hospitalization.

Comparison of Patient-Nurse Perceptions of Hospital Related Stress

The purpose of this study was to investigate the relationship between elective surgical patients' and surgical nurses' perceptions of hospital stress in a primary care setting. Table 5 describes the nurses' rankings of the same 49 events of the Hospital Stress Rating Scale,

Table 1: Demographic Characteristics of Nurse Sample.

	<u>Mean</u>	<u>Standard Deviation</u>	<u>N</u>
Age (years)	35.94	8.94	19
Number of hospitalizations	2.94	1.87	18
Years Experience as RN	10.80	9.30	19
Months of Employment on Nursing Unit	26.78	15.03	19

Table 2. Demographic Characteristics of Patient Sample (N=20)

	<u>Mean</u>	<u>Standard Deviation</u>
Age (years)	45.30	15.75
Years of Education	13.45	1.46
Number of Hospitalizations	5.50	3.80

along with the original rankings from the Volicer (1977) study. Patients' rankings of the same 49 items are described in Table 6, along with the original rankings from the Volicer (1977) study. The rank of one indicates the least stressful hospital event; the rank of 49 indicates the most stressful hospital event.

The mean of the patient group and nurse group ranks were used to order the 49 items from least to most stressful. Table 7 compares nurses' and patients' rankings of the Hospital Stress Rating Scale, along with Volicer's original rankings. A Kendall's Tau was computed to determine association between rankings by nurse and patient. The statistical test provides no evidence of a causal relationship between the variables. The proposed level of significance was $p < .05$. A Kendall's Tau of .758 was computed for the degree of association between patients' and nurses' perception, indicating a moderate substantive association between ranks. In order to determine statistical significance, a z score was computed and the appropriate p value was found from the normal table. The z score for statistical significance was $z = 1.116$. The computed z value of 7.684 was statistically significant at $< .05$. The results of this analysis suggest that nurses and patients in this study generally had the same perceptions of stress associated with hospital events. Kendall's Tau of .758 suggests a moderate direct association between the nurses' and patients's perceptions of hospital associated stress.

Even though the results of this analysis may show statistical significance, substantive significance may be another matter. Statistical

Table 3. Patient Classification According to Diagnosis. (N=20)

<u>Gynecological</u>	
adenohyperplasia	2
chronic cystitis	1
cystocele/rectocele	2
fallopian tube blockage	1
infertility	1
myoma	2
serosal fibrosis	1
uterine prolapse	2
stress incontinence	1
<u>Genito-urinary</u>	2
inguinal hernia(s)	1
<u>Gastro-intestinal</u>	
cholelithiasis	3
intestinal fistula	1
	<hr/> 20

Table 4. Types of Surgical Procedures Experienced by
Patient Sample (N=20)

<u>Gynecological</u>	
anterior-vesico uteropexy	1
cystocele/rectocele	1
pelvic laparotomy	1
tubal reanastomosis	1
total abdominal hysterectomy	7
vaginal hysterectomy	2
<u>Genito-urinary</u>	
inguinal herniorraphy	1
suprapubic prostatectomy	1
trans-urethral	1
<u>Gastro-intestinal</u>	
cholecystectomy	3
laparotomy/fistulotomy	1
	20

Table 5. Nurses' Assigned Rank of the Hospital Stress Rating Scale.

Item	Mean	Standard Deviation	Nurse Rank	Volicer and Bohannon Rank
Having to eat at different times than you usually do	5.10	7.51	1	2
Being awakened in the night by the nurse	6.68	4.36	2	6
Having to wear a hospital gown	8.10	5.74	3	4
Being cared for by an unfamiliar doctor	10.21	8.10	4	23
Having to sleep in a strange bed	10.73	8.66	5	3
Having to be assisted with bathing	10.84	6.32	6	7
Having strangers sleep in the same room with you	11.36	14.30	7	1
Having a roommate who is unfriendly	13.26	8.64	8	14
Having strange machines around	14.15	14.68	9	5
Being in the hospital during holidays or special family occasions	14.21	8.81	10	18
Having a roommate who has too many visitors	14.78	6.59	11	9
Not being able to get newspapers, radio, or TV when you want them	14.89	7.96	12	8
Being in a room that is too cold or too hot	15.73	10.09	13	16
Having to stay in bed or the same room all day	16.47	11.82	14	10
Being hospitalized far away from home	17.15	9.86	15	33
Not having friends visit you	19.31	9.53	16	15
Being aware of unusual smells around you	19.57	7.21	17	11
Not having family visit you	20.42	6.87	18	31
Thinking your appearance might be changed after your hospitalization	21.31	9.38	19	17
Having the staff be in too much of a hurry	21.68	13.27	20	26

Table 5. -- Continued

Item	Mean	Standard Deviation	Nurse Rank	Volicer and Bohannon Rank
Having to eat cold or tasteless food	21.78	7.92	21	21
Thinking you might have pain because of surgery or test procedures	22.05	13.78	22	19
Having to be assisted with a bedpan	22.26	6.40	23	13
Thinking about losing income because of your illness	23.00	9.73	24	27
Having a roommate who is seriously ill or who cannot talk with you.	24.26	13.03	25	12
Feeling you are getting dependent on medications	25.36	12.41	26	30
Not knowing when to expect things will be done to you	25.78	8.38	27	25
Not being able to call family or friends on the telephone	25.78	7.95	28	22
Thinking you might lose your hearing	26.52	12.07	29	45
Worrying about your spouse being away from you	26.68	8.88	30	20
Being put in the hospital because of an accident	28.84	7.87	31	24
Knowing you have to have an operation	29.00	11.78	32	32
Not knowing the results or reasons for your treatments	31.00	8.11	33	41
Having medications cause you discomfort	31.73	11.18	34	28
Not having your questions answered by the staff	33.57	10.50	35	37
Missing your spouse	34.84	7.56	36	38
Not having your light call answered	36.21	9.67	37	35
Not having enough insurance to pay for your hospitalization	36.68	6.73	38	36

Table 5 --Continued

Item	Mean	Standard Deviation	Nurse Rank	Volicer and Bohannon Rank
Not knowing for sure what illness you have	36.89	10.05	39	43
Not being told what your diagnosis is	37.42	7.47	40	44
Having nurses or doctors talk too fast or use words you can't understand	38.15	4.10	41	29
Having a sudden hospitalization you weren't planning to have	38.21	7.46	42	34
Not getting relief from pain medications	38.31	6.98	43	40
Thinking you might lose your sight	38.68	6.73	44	49
Being fed through tubes	39.42	6.68	45	39
Not getting pain medication when you need it	39.73	8.11	46	42
Thinking you might lose a kidney or some other organ	40.74	8.91	47	47
Knowing you might have a serious illness	42.78	7.45	48	46
Thinking you might have cancer	43.47	4.58	49	48

Table 6. Patients' Assigned Rank of the Hospital Stress Rating Scale

Item	Mean	Standard Deviation	Patient Rank	Volicer Rank
Having to eat at different times than you usually do	8.10	9.59	1	2
Having strangers sleep in the same room with you	10.10	10.91	2	1
Having to wear a hospital gown	10.60	10.52	3	4
Being awakened in the night by the nurse	11.15	8.43	4	6
Having to be assisted with bathing	12.25	8.31	5	7
Having strange machines around	14.15	12.19	6	5
Having to sleep in a strange bed	14.80	12.32	7	3
Not being able to get newspapers radio or TV when you want them	16.00	7.77	8	8
Having a roommate who has too many visitors	16.30	11.12	9	9
Having a roommate who is unfriendly	17.60	12.27	10	14
Not being able to call family or friends on the telephone	18.35	9.80	11	22
Having to stay in bed or the same room all day	18.70	12.06	12	10
Being cared for by an unfamiliar doctor	18.80	9.79	13	23
Thinking about losing income because of your illness	19.00	13.03	14	27
Having to be assisted with a bedpan	19.05	9.72	15	13
Being in a room that is too hot or too cold	19.50	12.80	16	16
Not knowing when to expect things will be done to you	20.05	10.05	17.5	25
Having the staff be in too much of a hurry	20.05	13.17	17.5	26

Table 6. --Continued

Item	Mean	Standard Deviation	Patient Rank	Volicer and Bohannon Rank
Being in the hospital during holidays or special family occasions	21.45	12.15	19	18
Not having family visit you	21.75	11.03	20	31
Having to eat cold or tasteless food	21.80	11.81	21	21
Being hospitalized far away from home	22.00	10.79	22	33
Thinking your appearance might be changed after your hospitalization	22.45	14.81	23	17
Being put in the hospital because of an accident	24.10	12.75	24	24
Not having friends visit you	24.90	12.65	25	15
Feeling you are getting dependent on medications	25.45	13.05	26	30
Worrying about your spouse being away from you	26.00	11.70	27	20
Having a roommate who is seriously ill or cannot talk with you	26.00	14.14	28	12
Thinking you might have pain because of surgery or test procedures	26.30	10.02	29	19
Knowing you have to have an operation	27.75	8.88	30	32
Not being told what your diagnosis is	29.25	12.67	31	44
Not knowing the results or reasons for your treatments	29.30	12.14	32	41
Being aware of unusual smells around you	29.60	11.19	33	11
Missing your spouse	30.05	13.50	34	38
Having a sudden hospitalization you were not planning to have	31.15	12.84	35	34
Not having your questions answered by the staff	32.15	11.28	36	37

Table 6. --Continued

Item	Mean	Standard Deviation	Patient Rank	Volicer and Bohannon Rank
Having medications cause you discomfort	32.26	10.17	37	28
Thinking you might lose your hearing	32.45	10.54	38	45
Having doctors or nurses talk too fast or use words you can't understand	33.15	8.59	39	29
Not having your call light answered	33.20	10.54	40	35
Not having enough insurance to pay for your hospitalization	33.35	9.62	41	36
Not getting relief from pain medications	33.95	11.89	42	40
Being fed through tubes	36.65	11.10	43	39
Thinking you might lose your sight	37.50	10.13	44	49
Not knowing for sure what illness you have	38.55	8.55	45	43
Knowing you have a serious illness	38.80	11.33	46	46
Not getting pain medication when you need it	39.05	11.07	47	42
Thinking you might lose a kidney or some other organ	39.50	7.98	48	47
Thinking you might have cancer	41.70	6.71	49	48

Table 7. Comparison of Nurses' and Patients' Assigned Rank of the Hospital Stress Rating Scale

Nurse Rank	Patient Rank	Item	Volicer and Bohannon Rank
1	1	Having to eat at different times that you usually do	2
2	4	Being awakened in the night by the nurse	6
3	3	Having to wear a hospital gown	4
4	13	Being cared for by an unfamiliar doctor	23
5	7	Having to sleep in a strange bed	3
6	5	Having to be assisted with bathing	7
7	2	Having strangers sleep in the same room with you	1
8	10	Having a roommate who is unfriendly	14
9	6	Having strange machines around	5
10	19	Being in the hospital during holidays or special family occasions	18
11	9	Having a roommate who has too many visitors	9
12	8	Not being able to get newspapers, radio or TV when you want them	8
13	16	Being in a room that is too hot or too cold	16
14	12	Having to stay in bed or the same room all day	10
15	22	Being hospitalized far away from home	33
16	25	Not having friends visit you	15
17	33	Being aware of unusual smells around you	11
18	20	Not having family visit you	31
19	23	Thinking your appearance might be changed after your hospitalization	17
20	17.5	Having the staff be in too much of a hurry	26

Table 7. -- Continued

Nurse Rank	Patient Rank	Item	Volicer and Bohannon Rank
21	21	Having to eat cold or tasteless food	21
22	29	Thinking your might have pain because of surgery or test procedures	19
23	15	Having to be assisted with a bedpan	13
24	14	Thinking about losing income because of your illness	27
25	27.5	Having a roommate who is seriously ill or cannot talk with you	12
26	26	Feeling you are getting dependent on medications	30
27	17.5	Not knowing when to expect things will be done to you	25
28	11	Not being able to call family or friends on the phone	22
29	38	Thinking you might lose your hearing	45
30	27.5	Worrying about your spouse being away from you	20
31	24	Being put in the hospital because of an accident	24
32	30	Knowing you have to have an operation	32
33	32	Not knowing the results or reasons for your treatments	41
34	37	Having medications cause you discomfort	28
35	36	Not having your questions answered by the staff	37
36	34	Missing your spouse	38
37	40	Not having your call light answered	35
38	41	Not having enough insurance to pay for your hospitalization	36

Table 7.--Continued

Nurse Rank	Patient Rank	Item	Volicer and Bohannon Rank
39	45	Not knowing for sure what illness you have	43
40	31	Not being told what your diagnosis is	44
41	39	Having nurses or doctors talk too fast or use words you can't understand	29
42	35	Having a sudden hospitalization you weren't planning to have	34
43	42	Not getting relief from pain medications	40
44	44	Thinking you might lose your sight	49
45	43	Being fed through tubes	39
46	47	Not getting pain medication when you need it	42
47	48	Thinking you might lose a kidney or some other organ	47
48	46	Knowing you have a serious illness	46
49	49	Thinking you might have cancer	48

significance regards the association between groups according to numerical computation. The larger the number of items compared, the more likely statistical significance will be demonstrated. Volicer and Bohannon's (1975) scale of 49 items is likely to show statistical significance due to the large number of items for comparison and computation. Substantive significance regards the actual meaning or impact of the results in clinical nursing practice. Lack of substantive significance interferes with true usefulness of the data for practice. One aspect of substantive significance is the difficulty subjects evidenced in agreeing on an item. Lack of consensus on certain items was defined by the investigator as a standard deviation greater than ten. This means that a group was considered in agreement on an item if 68 percent of the respondents were within (+) or (-) ten points of the mean ranks.

Both patients and nurses had difficulty in reaching consensus on a variety of items. The nurse sample failed to agree in ranking 13 items (26 percent of the scale items). Patients failed to agree in ranking 36 items (73 percent of scale items). Lack of agreement on these items limits the generalization of the data to any other nurse or patient population because the opinions of the current sample were heterogeneous. Specific unconsensual items are shown in Tables 8 and 9 respectively. For the purposes of this discussion regarding consensus of ranking, Volicer's (1977) nine factors were used. As described in Chapter 2, groups are: 1) unfamiliarity of surroundings, 2) loss of independence, 3) separation from spouse, 4) financial problems, 5) isolation from other people, 6) lack of information, 7) threat of severe illness, 8) separation from family, and 9) problems with medications.

The second aspect of substantive significance is the lack of consensus between the nurse and patient groups in ranking an item. Lack of consensus regarding this issue is defined as an absolute difference of five or more points between patient and nurse group rankings of an individual item. Table 10 describes those items which nurse and patient groups had difficulty in ranking similarly. Volicer's (1973) original ranks are also included in this table. Again Volicer's (1977) factors were used to categorize absolute differences between nurse and patient groups. The largest number of items on which both nurse and patient groups disagreed were in the category of lack of information. Nurses and patients also disagreed in ranking one or two items in each of the following categories: 1) unfamiliarity with surroundings, 2) loss of independence, 3) financial problems, 4) isolation from other people, 5) threat of severe illness, and 6) separation from family.

Comparison of Sample Rankings With Volicer's Results

A Kendall's Tau computed to determine the relationship between Volicer's study results and the surgical nurses studied in this research, indicated a moderate correlation between group perceptions. This can be seen in Table 11. The Kendall's Tau was computed as .702 ($z=7.116$; $p<.05$). This indicates a significant direct association between Volicer's rankings (1977) and those from the nurses in this study.

In addition, the relationship between Volicer and Bohannon's (1975) and surgical patients' ranks were compared by computation of the Kendall's Tau. Table 11 also describes the results of this analysis.

Table 8. Unconsensual Items Within Nursing Sample

Factor	Hospital Event	Nurse Rank	Standard Deviation	Volicer and Bohannon Rank
1) Unfamiliarity with Surroundings	Having strangers sleep in the same bed with you	7	14.30	1
	Having strange machines around	9	14.68	5
	Being in a room that is too hot or cold	13	10.09	16
2) Loss of independence	Having to stay in the same bed or room all day	14	11.82	10
5) Isolation from other people	Having the staff be in too much of a hurry	20	13.27	26
	Having a roommate who is seriously ill or cannot talk with you	25	13.03	12
6) Lack of information	Thinking you might lose your hearing	29	12.07	45
	Thinking you might have pain because of surgery or test procedures	22	13.78	19
	Not having your questions answered by the staff	35	10.50	37
7) Threat of severe illness	Not knowing for sure what illness you have	39	10.05	43
	Knowing you have to have an operation	32	11.78	32
9) Problems with medication	Feeling you are getting dependent on medication	26	12.41	30
	Having medications cause you discomfort	34	11.18	28

Table 9. Unconsensual Items Within Patient Sample

Factor	Hospital event	Patient Rank	Standard Deviation	Volicer and Bohannon Rank
1) Unfamiliarity with surroundings	Having strangers sleep in the same room with you	2	10.91	1
	Having strange machines around	6	12.19	5
	Having to sleep in a strange bed	7	12.32	3
	Being in a room that is too hot or too cold	16	12.80	16
	Having to eat cold or tasteless food	21	11.81	21
	Being aware of unusual smells around you	33	11.19	11
	2) Loss of independence	Having to wear a hospital gown	3	10.52
Having a roommate who has too many visitors		9	11.12	9
Having to stay in the same bed or room all day		12	12.06	10
Not having your call light answered		40	10.54	35
Being fed through tubes		43	11.10	39
Thinking you might lose your sight		44	10.13	49
3) Separation from spouse		Worrying about your spouse being away from you	27.5	11.70
	Missing your spouse	34	13.50	38
4) Financial Problems	Thinking about losing income because of your illness	14	13.03	27
5) Isolation from other people	Having a roommate who is unfriendly	10	12.27	14
	Having the staff be in too much of a hurry	17.5	13.17	26
	Not having friends visit you	25	12.65	15
	Having a roommate who is too seriously ill or cannot talk with you	27.5	14.14	12
	Thinking you might lose your hearing	38	10.54	45

Table 9. --Continued

Factor	Hospital Event	Patient Rank	Standard Deviation	Volicer and Bohannon Rank
6) Lack of information	Not knowing when to expect things will be done to you	17.5	10.05	25
	Thinking you might have pain because of surgery or test procedures	29	10.02	19
	Not being told what your diagnosis is	31	12.67	44
	Not knowing the results of reasons for your treatments	32	12.14	41
	Not having your questions answered by the staff	36	11.28	37
7) Threat of Severe illness	Thinking your appearance might be changed after hospitalization	23	14.81	17
	Being put in the hospital because of an accident	24	12.75	24
	Having a sudden hospitalization you weren't planning to have	35	12.84	34
	Knowing you have a serious illness	46	11.33	46
8) Separation from family	Being in the hospital during holidays or special family occasions	19	12.15	18
	Not having family visit you	20	11.03	31
	Being hospitalized far away from home	22	10.79	33
9) Problems with medication	Feeling you are getting dependent on medication	26	13.05	30
	Having medications cause you discomfort	37	10.17	28
	Not getting relief from pain medication	42	11.89	40
	Not getting pain medication when you need it	47	11.07	42

Table 10. Unconsensual Ranking of Items Between Patient and Nurse Samples

Factor	Hospital Event	Nurse Rank	Patient Rank
1) Unfamiliarity with surroundings	Being cared for by an unfamiliar doctor	4	13
	Being aware of unusual smells around you	17	33
2) Loss of independence	Having to be assisted with a bedpan	23	15
	Not being able to call family or friends on the phone	28	11
4) Financial problems	Thinking about losing income because of your illness	24	14
5) Isolation from other people	Not having friends visit you	16	25
	Thinking you might lose your hearing	29	38
6) Lack of information	Thinking you might have pain because of surgery or test procedures	22	29
	Not knowing when to expect things will be done to you	27	17.5
	Not knowing for sure what illness you have	39	45
	Not being told what your diagnosis is	40	31
7) Threat of severe illness	Being put in the hospital because of an accident	31	24
	Having a sudden hospitalization you weren't planning to have	42	35
8) Separation from family	Being in the hospital during holidays or special family occasions	10	19
	Being hospitalized far away from home	15	22

Table 11. Matrix of Kendall's Tau Results

	Patient Sample	Nurse Sample	Volicer and Bohannon Sample
Patient sample	1.0	-	-
Nurse sample	.758 (z=7.684)	1.0	-
Volicer sample	.727 (z=7.370)	.702 (z=7.116)	1.0

A Kendall's Tau of .726 ($z=3.697$; $p<.05$) indicates a statistically significant direct association between Volicer's rankings (1977) and those from the nurses in this study.

Conclusion

In conclusion, this research has demonstrated a direct association between nurses' and patients' perceptions of hospital related stress. However, the large number of items on the Hospital Stress Rating Scale increases the possibility of association regardless of the actual patient and nurse responses. Substantive significance of these results was addressed by considering the lack of agreement on specific items within and between sample groups. This research also demonstrated a direct association between Volicer's rankings of hospital events and patient group perceptions.

CHAPTER 5

DISCUSSION OF FINDINGS, IMPLICATIONS FOR NURSING, RECOMMENDATIONS AND CONCLUSIONS

This chapter discusses the findings and the implications of this study for nursing practice. Recommendations for further investigations and conclusions are also addressed.

Discussion of Findings

This research proposed that the concept of congruence between nurses' and patients' perceptions of hospital events was inappropriately assumed in the framework shown in Figure 1. Congruence is significant because it is an important factor in selecting the most appropriate nursing interventions, and ultimately reducing patient psychosocial stress and promoting physiological and psychosocial welfare. Boettcher (1978) stated that mutual goals, conjointly established by nurses and patients are necessary to promote adaption and change from patient disequilibrium to dynamic equilibrium. Statistical analysis of the nurses' and patients' rankings of the 49 hospitalization events indicated a moderate direct association between their rankings of hospital stressors.

The direct association between nurses' and patients' perceptions of hospital stressors supports the effectiveness of achieving desired patient outcomes that is described throughout nursing literature and research. This notion is supported by literature describing favorable

patient outcomes as a result of education to familiarize the patient with his surroundings, what he may anticipate during a hospitalization or a specific procedure and what he ought to know to increase his independence (Dumas,1963; Dediarian, 1976; Rickel, 1976; and Tully and Warden, 1978). Nursing research describes favorable patient outcomes as a result of nursing interventions. For example, emotional support, communication techniques and touch (Ginsburg,1972; Garder, 1979; Heidt, 1981; and Krieger,1981) support the notion of nurse-patient congruence of patient perception described in the conceptual framework of this study.

Statistical significance of these research findings suggests that the concept of congruence between nurses' and patients' perceptions of the hospital experience may not be inappropriately assumed, as proposed in this literature. However, the percentage of items that nurses as a group and patients as a group failed to agree upon raises the issue of substantive significance.

In general, nurses expressed difficulty in rank ordering the 49 events on the scale. They contributed their difficulty to: 1) the large number of events on the scale, 2) inability to generalize across such a broad patient population, 3) inability to eliminate their own bias from a previous personal experience, and 4) conflict between generalizing across a patient population and their individualized unit approach to total patient care.

Nurses as a group failed to reach consensus in ranking six of Volicer's nine factored categories. Regarding disagreement within the

category of unfamiliarity with surroundings, the predominant design of private rooms on the study unit may have influenced nurses' rankings. Ninety-two percent of available beds are in private rooms, which are individually controlled for temperature. In addition, the only equipment in some of the patient rooms was a small incentive spirometry device from the Respiratory Therapy Department. Patient subjects initiated the device themselves for hourly deep breathing exercises while awake. Regarding the factor, loss of independence, nurses failed to agree upon one item - having to stay in the same bed or room all day. Levels of independence for patients in this study varied according to the surgical approach. Initial and progressive ambulation for the herniorrhaphy surgical patient was much sooner and more progressive initially than the abdominal surgical patient. The unit philosophy for total patient care focuses on individualized patient care after careful assessment of the situation by the registered nurse. It is likely that the wide range of surgical approaches and unit philosophy may have contributed to the lack of agreement on this item.

Nurses also disagreed in ranking three events in the category of lack of information. In a similar study describing patients' and nurses' perceptions of patient learning needs, Lauer (1982) found nurses ranked the importance of information much higher than patients. Though nurses did not consensually agree on specific aspects of education, in general they felt a responsibility to provide individualized information depending on a patient's individual learning needs and coping ability.

Within the three categories of isolation from other people, threat

of severe illness and problems with medications, nurses did not agree on a total of six items. This also raises the issue of substantive significance. Leonard and Skipper (1965) suggested that nurses as well as physicians and other health care workers are socialized into the culture of the hospital. They tend to share a common orientation which the patient does not. Personnel tend to forget that their values, beliefs and attitudes and even the way of doing things in response to the situation may be very different than their patient's expectations of the role. When this occurs, the potential to become ethnocentric is likely to occur and personnel fail to perceive the cultural variation that exists between themselves and patients in the hospital environment. Such an ethnocentric barrier can be a barrier to communication between the patient and nurse and a barrier to objective patient assessment. Compounding the potential barriers of this bias is the current trend to increase productivity and efficiency in the health care organization (Leonard and Skipper, 1963). These trends strengthen the characteristics of the social structure within the hospital environment, as described by Goffman (1961) and Leonard and Skipper (1963).

The patient rankings of hospital events also demonstrated difficulty in reaching group consensus on all nine categories. They failed to reach consensus on 36 of the 49 scale items. When the investigator collected the completed data from the patient subjects, they expressed difficulty in rank ordering the 49 events. In general, they wished they would have been allowed to : 1) consider this hospitalization only, 2) rank only those events that they had experienced during this hospitalization and 3) support the ranking of events as they did by explaining

their reasoning to the investigator.

One patient who reconsidered her participation in the study and eventually refused to participate stated there were too many events to rank. She could only relate to about half of the events and felt her ranking of the others would be by purely guessing what someone else's perception was. She also stated dissatisfaction that she should have to consider the events in relation to any abdominal or gynecological surgery, rather than just her own specific surgical approach. Several other patients said that their perceptions of need varied markedly according to their number of post-operative days and their general feeling of well-being.

The large number of unconsensual items within the patient group suggests that the patient sample may not be as homogeneous as anticipated. It also suggests that patients' perceptions of the hospital events may vary according to their sense of well-being. Patients who responded on the second post-operative evening may have responded very differently than the patient who ranked the events on the fourth post-operative evening.

Implications for Nursing

Comparison of nurses' and patients' rankings of hospital events indicates a moderate direct association between their perceptions of associated stress. Roy (1980) supports the idea that nursing activity is aimed at supporting patient adaptation to conserve patient energy for physical recovery and coping behaviors. The nurse as a regulatory force modified the environment to increase, decrease or maintain stimulation

to positively influence the force of events the patient experiences. This research indicates congruence between nurses' and patients' perceptions of the hospitalization events suggests that nurses are appropriately initiating the dependent functions of nursing - assessing the patient's needs before planning and implementing nursing care.

A whole new set of patient needs arises as a consequence of hospitalization and treatment. They require the special skill and function labeled as supportive, expressive and person oriented according to Wooldridge (1968) and Wolfer (1973). The balance of exceptional interpersonal skills and intricate technical- physical skills are individualized to maximize patient comfort and psychosomatic adaptation to his present condition and future rehabilitation.

One reflection of nursing effort to meet this set of patient needs is the total patient care staffing methodology. Total patient care falls on a continuum between team and primary nursing in relation to job design characteristics. In total patient care, one nurse assumes complete care of a group of patients for one working shift. In most instances, patients receive care from three nurses in a 24 hour period. Responsibility for the patient's care is shared equally by each nurse. The relationship is considered therapeutic and the RN goal is to provide direct nursing interaction with the patient to anticipate and treat physical as well as emotional needs (Joiner et al., 1981).

The fact that nurses and patients described difficulty in rank ordering the events supports the basic assumption of the conceptual

framework proposed in this research study. Man is an "open system" who creates the world through processes such as learning, perception, cognition and language (Roberts, 1976). Evidence that the patient and nurse groups were unable to reach group consensus regarding rank ordering of the hospital events suggests how differently individuals perceive the same events.

Hospitalization which leads to changes in one's life and the concerns which result in psychosocial stress vary according to the individual's needs and perceptions of the situation. This is supported by Lazarus (1966) who suggests that one cognitively appraises a stimulus, interprets its meaning and determines its significance. In response to that process, nurses intervene to reduce the anticipated or evident psychosocial stress. For example, if the nurse anticipates patient lack of information, she will offer information to reduce patient feelings of uncertainty, anxiety and fear. In addition, she has received training in natural and behavioral sciences which allows her to synthesize and conceptualize this knowledge into fostering patient physical and psychological welfare.

Regarding the lack of consensus among the nurse and patient groups in group ranking of the events, methodological dilemmas in tapping the concept of patient needs has been addressed by Williamson (1978). In examining congruence between patients' and nurses' perceptions of patient needs, Williamson (1978) states that to identify and separate physical and/or emotional needs is difficult if not impossible. This is because the presence or absence of a physical condition evokes an emotional

response. The reciprocal relationship is also true. For example, the ulcerative colitis post-operative patient's physical need requires a specific diet; if the diet is unacceptable just once, an emotional response is evoked. The emotional response, in turn, evokes additional physical needs. This has also been supported in the literature by Kagan and Levi (1974) and Strain and Grossman (1978). Williamson (1978) states the complexity of identifying perceived needs can be altered considerably in a short period of time for the same individual, affecting consistence in instrument measurement results. She also suggests that the research investigator should select a homogeneous sample with a similar diagnosis to strengthen generalizability of the findings. Development or selection of a mature tool with acceptable reliability is essential for measurement of perceptions. The sample of patients used in this research study may not be similar enough. In addition, the design of the study did not allow for analysis of the demographic data. This research proposed analysis across the patient and nurse groups only. The number in each subgroup according to the variables reviewed were too small for analysis by variables other than the entire nurse or patient groups.

The larger number of items used in Volicer's scale were difficult to rank according to both nurses and patients. Nurses' lack of group consensus may be a result of the nursing emphasis of individualism in total patient care. Patients' lack of group consensus may be the result of the inter-dependency of emotional and physical needs described by Williamson (1978). Hegedus (1979) used Volicer's scale as a criterion measurement of patient outcomes of nursing on a primary care unit. Patients were asked to divide the 49 events into the groups: those events they had experienced

during the current hospital stay and those events they had not experienced during the hospital stay. Stress scores (as determined by assigned scale values) were totaled for the experimental group which received primary nursing care and the control group, which received team nursing care. The primary nursing experimental group consistently experienced less stressful scores than the control group, which supports the notion of congruence between patients' and nurses' perceptions of patient needs in a primary care unit. Daeffler (1975) described similar results, emphasizing the importance of expressive functions in primary nursing, such as explaining, reassuring, understanding, listening and supporting as appropriate.

In summary, this study further emphasizes the importance of nurse-patient congruence of patient perception of the hospital experience. Nurses and patients in this study generally perceived the same hospital events as stressful. This supports the importance of effective communication between nurse and patient following the nurses' careful assessment of a given situation. The staffing methodology of individualized total patient care is aimed at anticipating and treating physical and emotional patient needs through direct nurse-patient interaction. This may be one way to foster congruence between patient and nurse perceptions of patient needs. As nurse-patient congruence is increased, the nurse is more likely to select the most effective nursing intervention, which will reduce hospital associated stress and ultimately enhance patient welfare.

Consequently, in addition, as congruence between nurse-patient perception increases, hospital associated stress is reduced. Perception is a form of behavior which allows an individual to interact with and

adjust to varying demands of the environment and situation. This was evident by the lack of consensus among nurse and patient groups and between nurse and patient groups regarding certain hospital events. It is known that perception is influenced by one's own personal motives, previous learning and personality (Szilagyi, 1981). This research emphasizes the differences in surgical patient and nurse perceptions of events. Effective nurse-patient communication is required to define the situation from the patient's point of view. Defining the situation from the patient's point of view to determine congruence between patient and nurse is essential before any nursing action should be implemented.

Recommendations for Further Study

This study should be replicated using a larger sample to give the statistics more impact. A more homogeneous patient population should be considered. For example, the study might focus on only abdominal hysterectomy or only cholecystectomy patients. Multivariate statistics to determine if there is a difference in absolute value between groups on a vector of specific variables should be considered.

The conceptual framework of this study made the assumption that if the relationship exists in a one to one relationship, a group of similar surgical patients would be very likely to exhibit the same relationship when cared for by a group of primary care (surgical) nurses. The matching of patient and nurse paired samples would offer a sounder study. This approach would allow the researcher to test the relationship between stress and congruence. Computations of a Pearson's r to determine the

correlation between each item should also be considered. In addition, patients and/or nurses should be asked to consider only those events experienced during that particular hospitalization.

Conclusions

The research proposed that the concept of congruence between nurses' and patients' perceptions of hospital stress was inappropriately assumed. This research also recognized the importance of perception congruence in relation to both hospital associated stress and nursing interventions.

According to this study, there is a direct association between surgical nurses' and elective surgical patients' perceptions of the psychosocial stress associated with hospitalization events. They generally agreed regarding the rank ordering of events from least stressful to most stressful using the 49 items from the Hospital Stress Rating Scale.

Even though the results of this study show statistical significance, substantive significance is another matter. Substantive significance regards the actual meaning or impact of the results on clinical nursing practice. Both nurse and patient groups failed to agree on the amount of stress regarding various hospital events. Both patients and nurses described difficulty in rank ordering such a large number of events and in generalizing to a specific population rather than considering only those events associated with their current hospital experience. The cluster sampling approached uses a group of nurses and a group of patients as the unit of analysis. This may not have been the most appropriate

approach to reflect congruence between the two groups. The number of items that each group failed to agree upon emphasizes the influence of perception on any hospital event. Issues which may have influenced study results were addressed in Chapter 1V.

This research cannot describe any causal relationship between nurse-patient congruence and hospital associated stress; it does emphasize the importance of matching perceptions as a means to ultimately enhancing patient welfare. Despite the lack of agreement within the nurses or patient group regarding various items, congruence of perceptions related to the stress of hospital events does exist in this sample population.

APPENDIX A

THE UNIVERSITY OF ARIZONA COLLEGE OF NURSING
MEMORANDUM

TO: Sharon Ann Chamberlain

1315 Avenida Sirio, Tucson 85710

FROM: Ada Sue Hinshaw, R.N., Ph.D. - Jan Atwood, R.N., Ph.D.
Director of Research *AS* Chairman, Research Committee

DATE: May 13, 1982

RE: Human Subjects Review: "Congruence of Patients' and Nurses'
Perceptions Regarding the Stress of Hospitalization"

Your project has been reviewed and approved as exempt from University review by the College of Nursing Ethical Review Sub-committee of the Research Committee, and the Director of Research. A consent form with subject signature is not required for projects exempt from full University review. Please use only a disclaimer format for subjects to read before giving their oral consent to the research. The Human Subjects Project Approval Form is filed in the office of the Director of Research, if you need access to it.

We wish you a valuable and stimulating experience with your research.

ASII:ss
1982

APPENDIX B

**El Dorado
Hospital**
and Medical Center

1400 North Wilcox Road
PO Box 13070
Tucson, Arizona 85732
Tel. (602) 386-6361

M E M O R A N D U M

Permission Memorandum

DATE: May 12, 1982
TO: Sharon Chamberlain
FROM: Barbara V. Tucci, Director of Nursing Services
SUBJECT: Research Permission

Sharon Chamberlain has been granted permission, by me, to approach surgical patients on 2 West for her research:

"Congruence of Patients - Nurses Perceptions
Regarding the Stress of Hospitalization"

This will be effective Monday, May 17, 1982.

APPENDIX C



AMERICAN JOURNAL OF NURSING COMPANY

555 WEST 57TH STREET • NEW YORK, NEW YORK 10019 • 212-582-8820

February 18, 1982

Sharon Ann Chamberlain, R.N., B.S.N.
1315 Avenida Sirio
Tucson, Arizona 85710

Dear Ms. Chamberlain:

Thank you for your letter of February 8, 1982.

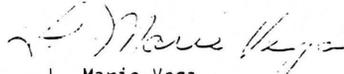
Permission is hereby granted for you to utilize the chart "Hospital Stress Rating Scale" which accompanies the article "The Hospital Stress Rating Scale" from the September/October 1975 issue of Nursing Research.

It is our understanding that this scale will be used to collect data for your masters thesis. Please use the following credit line as acknowledgement of permission received.

Copyright (c) 1975, American Journal of Nursing Company.
Reprinted from Nursing Research, September/October, Vol. 24,
No. 5. The Hospital Stress Rating Scale was developed by
Beverly J. Volicer, R.N., Ph.D., and Mary Wynne Bohannon, R.N.
M.S.N.

Thank you for your cooperation and interest in our materials.

Cordially yours,


L. Marie Vega
Permissions Editor

APPENDIX D

HOSPITAL STRESS RATING SCALE

by: Volicer, Beverly J., and Bohannon, Mary W.

Assigned Rank	Factor	Event
_____	1	(1) Having strangers sleep in the same room with you
_____	2	(2) Having to eat at different times than you usually do
_____	3	(1) Having to sleep in a strange bed
_____	4	(2) Having to wear a hospital gown
_____	5	(1) Having strange machines around
_____	6	(1) Being awakened in the night by the nurse
_____	7	(2) Having to be assisted with bathing
_____	8	(2) Not being able to get newspapers, radio, or TV when you want them
_____	9	(2) Having a roommate who has too many visitors
_____	10	(2) Having to stay in bed or the same room all day
_____	11	(1) Being aware of unusual smells around you
_____	12	(5) Having a roommate who is seriously ill or cannot talk with you
_____	13	(2) Having to be assisted with a bedpan
_____	14	(5) Having a roommate who is unfriendly
_____	15	(5) Not having friends visit you
_____	16	(1) Being in a room that is too cold or too hot
_____	17	(7) Thinking your appearance might be changed after your hospitalization
_____	18	(8) Being in the hospital during holidays or special family occasions
_____	19	(6) Thinking you might have pain because of surgery or test procedures
_____	20	(3) Worrying about your spouse being away from you
_____	21	(1) Having to eat cold or tasteless food
_____	22	(5) Not being able to call family or friends on the phone
_____	23	(1) Being cared for by an unfamiliar doctor
_____	24	(7) Being put in the hospital because of an accident
_____	25	(6) Not knowing when to expect things will be done to you
_____	26	(5) Having the staff be in too much of a hurry
_____	27	(4) Thinking about losing income because of your illness
_____	28	(9) Having medications cause you discomfort
_____	29	(6) Having nurses or doctors talk too fast or use words you can't understand
_____	30	(9) Feeling you are getting dependent on medications

APPENDIX D --Continued

Assigned Rank	Factor	Event
---	31	(8) Not having family visit you
---	32	(7) Knowing you have to have an operation
---	33	(8) Being hospitalized far away from home
---	34	(7) Having a sudden hospitalization you weren't planning to have
---	35	(2) Not having your call light answered
---	36	(4) Not having enough insurance to pay for your hospitalization
---	37	(6) Not having your questions answered by the staff
---	38	(3) Missing your spouse
---	39	(2) Being fed through tubes
---	40	(9) Not getting relief from pain medications
---	41	(6) Not knowing the results or reasons for your treatments
---	42	(9) Not getting pain medication when you need it
---	43	(6) Not knowing for sure what illness you have
---	44	(6) Not being told what your diagnosis is
---	45	(5) Thinking you might lose your hearing
---	46	(7) Knowing you have a serious illness
---	47	(7) Thinking you might lose a kidney or some other organ
---	48	(7) Thinking you might have cancer
---	49	(2) Thinking you might lose your sight

Code # _____

This scale shall be data collection sheet for subject rankings of hospital stress.

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 No. 5. The Hospital Stress Rating Scale was developed by
 Beverly J. Volicer, R.N., Ph.D., and Mary Wynne Bohannon, R.N.
 M.S.N.

APPENDIX E

HOSPITAL STRESS RATING SCALE

INSTRUCTIONS

- STEP 1: You have received 49 cards. Each card describes a hospitalization event. Separate the events into 3 different groups (most stressful, moderately stressful and least stressful). Base your decision according to how you think ANY abdominal or gynecological surgical patient would feel, rather than your own feelings about a personal surgical experience. Do not consult others as you are making your decisions. Rank each card. Do not leave any cards out of the ranking.
- STEP 2: You have already separated the events into 3 different groups. Consider only the group of events you decided were MOST stressful. Rank this group of cards in order from most stressful to least stressful. (When you are done, the first card in this group will be the most stressful event; the last card in this group will be the least stressful event within this group of cards.) Now, put a rubberband around this group of cards. Write MOST on the top card in the group. Return the banded group of cards to the envelope.
- STEP 3: Repeat the process with the group of cards you decided were MODERATELY stressful. After you have ranked these cards, put a rubberband around them. Write MODERATE on the top card in this group. Put this group of banded cards into the envelope.
- STEP 4: Repeat the process with the group of cards you decided were LEAST stressful. After you have ranked these cards, put a rubberband around them. Write LEAST on the top card in this group. Put this group of banded cards into the envelope.
- STEP 5: Return the disclaimer sheet and the instruction sheet to the envelope. Return the envelope to the researcher.

APPENDIX F

Congruence of Patients' and Nurses' Perceptions
Regarding the Stress of Hospitalization

NURSE DISCLAIMER

The purpose of this study is to determine the relationship between a group of primary surgical nurses and a group of elective surgical patients with respect to perceptions of hospital stress. You are being asked to voluntarily rank 49 hospital events from the most stressful to least stressful. You will be giving your consent to participate by responding to the statements. The information you provide will not affect your employment status in any way. There are no known risks to the study. You may ask questions of the investigator or withdraw from the study at any time. The information you provide will never be associated with your name and will be available to the researcher only.

INSTRUCTIONS

I. Please answer the following questions.

1. What is your age? (in years) _____
2. What is your sex? _____
3. What is your race? _____
4. What is your highest level of nursing education? _____
5. How many times have you been hospitalized? _____
6. What were the reasons for hospitalization? (medical versus surgical admissions). _____
7. When did you graduate from a nursing program? _____
8. How many months have you worked on 2 West? _____

II. The enclosed envelope contains the instructions for ranking the 49 hospital events. Each of the 49 cards in the envelope will describe a separate hospital event. The researcher will review the instructions with you if you have questions.

Code # _____

APPENDIX G

Congruence of Patients' and Nurses' Perceptions
Regarding the Stress of Hospitalization

PATIENT DISCLAIMER

The purpose of this study is to determine the relationship between a group of primary surgical nurses and a group of elective surgical patients with respect to perceptions of hospital stress. You are being asked to voluntarily rank 49 hospital events from most stressful to least stressful. You will be giving your consent to participate by responding to the statements. By participating, you shall also be giving the researcher access to your medical record. The information you provide will not affect the nursing care you receive in any way. There are no known risks to this study. You may ask questions of the investigator or withdraw from the study at any time. The information you provide will never be associated with your name and will be available to the researcher only.

INSTRUCTIONS

I. Please answer the following questions.

1. What is your age? (in years) _____
2. What is your sex? _____
3. What is your race? _____
4. What is your highest level of education? _____
5. How many times have you been hospitalized? _____
6. What is your diagnosis?(if you know). _____
7. What type of surgery did you undergo? _____

II. The enclosed envelope contains the instructions for ranking the 49 hospital events. Each of the 49 cards in the envelope will describe a separate hospital event. The researcher will review the instructions with you.

Code # _____

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