# PATIENTS' AND NURSES' EVALUATIONS OF PRIMARY AND TEAM NURSING ASSIGNMENT METHODOLOGIES

by

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ABSTRACT

The study sought to evaluate the patients' and the nurses' perceptions of primary and team nursing. A comparative descriptive design was used in order to compare the two nursing care modalities.

Forty patients and fifty nursing staff participated in the study by completion of questionnaires. The four null hypotheses were supported. There were no differences between the patients' perceptions of nursing care or preparedness for discharge on a primary nursing unit when compared to a team nursing unit. In addition, there were no differences between nurses' job satisfaction or job stress on a primary nursing unit when compared to a team nursing unit. The t-test revealed no significant differences at the 0.05 level between the two groups of patients nor between the two groups of nursing staff.

# CHAPTER 1

## INTRODUCTION

The entire health care delivery system is under attack by consumers, health professionals, politicians, and others to facilitate access to health services, to decrease the cost of health services, and to evaluate the health care delivery system. Nursing shares in the responsbility to meet demands of these health care consumers (Hegyvary, 1977).

One of the ways nursing has been trying to meet the demands of the consumer is through the evaluation of nursing care. Derryberry (1939, p. 2035) stated in a study of nursing accomplishments: "In the past evaluations of nursing services have been based upon volume and intensity of service. . . . Evidence of the more illusive quality of service, as expressed by the changing stage of the patient has been sought in the present analysis." Since the conception of evaluating nursing care there has been considerable nonregulated and now legislated activity to develop criteria to measure the quality and effectiveness of nursing care. In 1972, the Professional Standards Review Organization (PSRO) legislation (P.L. 92-603) was developed to monitor the quality of medical care financed by federal funds. Although the PSRO legislation is strongly physician-oriented, other health care providers are not excluded and the regulations provide for their participation

(U.S. Department of Health, Education and Welfare, 1974, Chapter VII, Section 730). Recently, the federal government awarded a contract to the American Nurses' Association (ANA) to develop model sets of screening criteria to measure the quality and effectiveness of nursing care, to test the validity of these criteria, and to formulate guidelines for the involvement of nurses in the review processes and in PSRO's ("ANA Peer Review Criteria," 1974). Nursing is just now beginning self-evaluation under the PSRO system.

One of the ways to evaluate the quality and effectiveness of nursing care is to critically examine the type of modality used to deliver care. This can be done by measuring outcomes. For the past twenty years, nursing has been delivering care by the team nursing method. Essentially, team nursing is one method of delivering nursing care to achieve comprehensive, continuous, patient-centered care. Team nursing was developed in the 1940's out of necessity of the great demand for nurses. Team nursing was based on the premise that a small group working together could give better patient care than these same individuals would if working alone. Each team member would be utilized according to his abilities and the needs of the patient. The team would be guided and supervised by a professional nurse (Kron, 1971). Some of the problems identified with the team delivery system are that: 1) there exists a high degree of fragmentation in the care process with a patient seeing a very large number of nursing staff in a day, and little consistency in personnel from day to day; 2) participation in direct patient care activities does not vary much among different

categories of nursing staff, such as a registered nurse (RN), licensed practical nurse (LPN), and nurse assistant (NA); 3) physical care of patients is generally well provided, but little time is devoted to assessment, planning, and evaluation of care rendered, or to nonphysical needs, such as patient teaching; 4) a large proportion of nursing time is spent in charting and reporting activities, yet documentation of the nursing care process is poor; 5) nursing care personnel are involved in nonpatient care activities, such as errands to other departments, housekeeping functions, stocking and supply activities; 6) nonproductive time of limited task specialists (NA) tends to be high; and 7) there exists insufficient communication among members of the team (Elpern, 1977).

Primary nursing is another method of delivering care to achieve comprehensive, continuous, patient-centered care. Primary nursing is now thought to be the answer to the problems and weaknesses of team nursing. The primary nurse, a registered nurse, is accountable and responsible for planning and evaluating the total care for assigned patients. The plan of care is formulated by the primary nurse in collaboration with other members of the health care team and is communicated through the written Nursing Care Plan. The nursing process is utilized by the primary nurse to assess, define, and initiate interventions for patient and nursing problems. The associate nurse, an RN or LPN, renders care under the direction of and in cooperation with the primary nurse by following the written Nursing Care Plan. This method of nursing care delivery facilitates direct communication with the physician or other members of the health care team. Each nurse takes

more responsibility for completing the daily tasks involved in the care of her patients. Primary nursing also enhances discharge planning. The primary nurse is aware that no one else on the unit is going to assume responsibility for teaching her patients or for making arrangements for the nursing care of her patients after discharge (Manthey et al., 1970). Primary nursing is also thought to enhance professional behavior.

Each assignment methodology has its advantages. Each assignment methodology, when conceived, was thought to be the best method of delivering care. Each assignment methodology needs to be evaluated to determine its effectiveness by questioning the nurse as a provider of care and the patient as the consumer of care. Only when each modality is evaluated by the individuals involved will objective information be obtained.

## Statement of the Problem

1. How does the patient's perceptions of nursing care and the preparation for discharge on a primary nursing unit differ from the patient's perception of nursing care and preparation for discharge on a team nursing unit?
2. How does the nurse's job satisfaction and job stress on a primary nursing unit differ from the nurse's job satisfaction and job stress on a team nursing unit?

## Purpose of the Study

The purpose of this study was two-fold. First, it was to determine if specific measures of patients' perceptions of nursing care and

preparation for discharge differ between two selected groups of patients, one group receiving care on a unit utilizing team nursing as a method of assignment, the other group receiving care on a unit utilizing primary nursing as a method of assignment. Second, it was to determine if specific measures of job satisfaction and job stress differ between two selected groups of nurses, one group working on a unit utilizing team nursing as a method of assignment, the other group utilizing primary nursing as a method of assignment.

## Significance of the Problem

The evaluation of nursing care is currently a highly popular topic. The literature revealed a growing concern to further evaluate and then improve the quality of nursing care (Donabedian, 1966; James, 1961; Zimmer, 1974; Bloch, 1975).

Attempts to determine which nursing care delivery system will achieve high quality patient outcomes are of great interest to everyone. High quality patient outcomes are of interest to the following: 1) nursing service administrators who are concerned with providing a safe and healing environment for patients and providing a work situation conducive to effective utilization of personnel; 2) health care consumers who are concerned with the most economic, effective, and yet personalized way to receive health services; and 3) the nurse as the provider of care because only through evaluation of the system can the practitioner ascertain whether or not the work is "good."

## Conceptual Framework

Examining the similarities or dissimilarities of patients' perceptions and preparation for discharge and the nurses' attitudes toward job satisfaction and job stress under two modalities of care delivery, the conceptual framework will adopt an evaluation perspective.

Evaluation involves an estimate or decision of value, worth or quality by a measurement of congruence between objectives and performance, or a professional judgment (Stufflebeam, 1971). Three classical frameworks for evaluating patient care are structure, process, and outcome (Donabedian, 1966). Briefly, the structure framework involves the factors of the system, such as the physical facilities, staffing patterns, styles of supervision, and characteristics of care givers. The second framework involves the study of the process of giving care, namely what the care giver does. The third framework, the study of outcomes, refers to the results of care in terms of changes in the recipient of that care. The literature recognizes that the process-related-to-outcome type of evaluation yields the most objective information (Donabedian, 1966; Bloch, 1975). Donabedian (1966) stated that, although outcomes might indicate good or bad care in the aggregate, they do not give an insight into the nature and the location of the deficiencies or strengths to which the outcome might be attributed.

Lambertson (1965) suggests that professional nurses have been negligent in not distinguishing between the administration of nursing services and the requirement of delivering direct services to individuals and families.

Therefore, only when evaluation of a health care service includes both patients' and nurses' perceptions will a more realistic picture of nurses and nursing care be obtained (Risser, 1975). Perception is a key concept of human behavior and is the link between the stimulus and environment (King, 1962). Perceptions, referring to both the nurse's and the patient's, are influenced by many things over which one has no control. However, the patient's perceptions are relevant to his illness and the care received during hospitalization. The health care provider's perceptions are relevant to the patient's illness, the patient's attitudes, the care the patient requires, and also the environment in which the provider works. As various authorities have pointed out, the patient and the provider of health care services may differ significantly in their perceptions of what quality care is and to what extent it is present due to the different frames of reference.

The term "value," or "attitude," may possibly be the most important and yet least understood component of the employee's performance. Attitudes in adults represent a highly complex matrix of human behavior. The term "attitude" has no clear-cut definition and can be interchanged with the terms "value" and "opinion." Bunning (1976) stated that attitudes originate in simple responses of approach and withdrawal. Attitudes are formed to assist the individual with adapting to his environment, to assist the individual with functioning or operating better in the adult rational world, and to bolster the self-concept. Attitudes have motives and reasons behind them. Thus, if the reasons behind the attitudes can be determined, the attitude has the potential

of being better understood. The other aspect about attitudes is that they are learned, suggesting that they can be changed or modified through further learning (Bunning, 1976; Tetreault, 1976). In order for the nurse to maintain a healthy self-concept, her attitudes may change once she is in the work setting. Contributing factors to attitude change are the nature of the work assignments, the physician-nurse relationships, the quality and amount of communication, the nurse as viewed within the organization by other departments, the type of feedback the nurse receives from peers, and the prevailing attitudes of administrators and supervisory personnel (Harrington and Theis, 1968).

Many authors believe that the patients' responses about their perception of care will improve if the nurse's attitude about the type of care being given improves (Felton, 1975; Daeffler, 1975; Ciske, 1974a; Marran, 1975; Estok, 1978; Harper, Marcom, and Wall, 1972). The key here is possibly not the modality of care delivery, but the attitude the nurse has about self and work.

In summary, an evaluation of the two modalities of nursing care delivery should provide an estimate of the quality of care rendered by the professional care giver. The conceptual framework adopted an evaluation perspective as it focused on nurses' attitudes and patients' perceptions. The link between the concepts had been well-established in the literature. Nurses' attitudes had been shown to influence the perceptions the patient forms about nursing care.

## Hypotheses

1. The patients' perception of nursing care on a primary nursing unit will not differ significantly from the patients' perception of nursing care on a team nursing unit as measured by the Risser instrument.
2. The patients' perception of preparedness for discharge on a primary nursing unit will not differ significantly from the patients' preparedness for discharge on a team nursing unit as measured by the Atwood and Hinshaw instrument.
3. Nurses' job satisfaction on a primary nursing unit will not differ significantly from nurses' job satisfaction on a team nursing unit as measured by the Slavitt instrument.
4. Nurses' job stress on a primary nursing unit will not differ significantly from nurses' job stress on a team nursing unit as measured by the Claus instrument.

## Definition of Terms

1. Acuity: A method of classifying or categorizing patients into different groups depending on their nursing care requirements. The relationship between nursing care hours and the classification rating is shown in Table 1.
2. Attitude: The degree of positive or negative effect associated with some psychological object. The psychological object could be a symbol, phrase, slogan, person, situation, ideal, or idea toward which people can differ with respect to a positive or negative effect.

Table 1. Categories for Classifying the Acuity Rating as Utilized in the Study Hospital.

| Category | Definitions |
|---|---|
| 5* Intensive Care 10-14 NCH** | 1) Acutely ill; requires constant or frequent observations; not necessarily terminal.<br>2) Activity must be rigidly controlled.<br>3) Requires continuous or very frequent treatments. |
| 4 Modified Intensive Care 7-8 NCH | 1) Acutely ill; requires frequent observation; may or may not be terminal case.<br>2) Limited activity; is dependent on others for basic needs or ADL.<br>3) Requires frequent treatments. |
| 3 Intermediate Care 5-6 NCH | 1) Extreme symptoms have not subsided or have not yet appeared. Usually moderately ill.<br>2) Behavior pattern deviates moderately yet does not require close observation.<br>3) Activity must be partially controlled or requires periodic treatment. |
| 2 Minimal Care 3-4 NCH | 1) Mildly ill or convalescent.<br>2) Activity is controlled, requiring little treatment or observation.<br>3) Needs very little help with personal hygiene. |
| 1 Self-Care 1-2 NCH | 1) Usually ambulatory; activities are not limited; requires a minimum of observation. |
| 0 Special Conditions | Patient having one or more of the following conditions shall be classified as above, but at one higher step of nursing care need:<br>1) Isolation for communicable or infectious disease.<br>2) Handicap (blind, deaf, dumb, amputee).<br>3) Senility, confusion, or general debility of age.<br>4) Incontinent or semi-comatose or paraplegic.<br>5) Continuous temperature about 102 degrees or non-stable blood pressure. |

*Any patient that could be classified as 5+ should have a nurse-patient ratio of 1:1.

**NCH = nursing care hours = hours of direct care per patient per 24 hours.

3. Evaluation: Estimate or decision of the value, worth, or quality.

4. Nursing Care Hours: The actual hours of direct nursing care per patient per 24 hours. Direct patient care does not include the head nurse or the unit clerk staff. Nursing Care Hours are determined by the specialization of nursing unit, the average age of the patient population, and the average acuity of the patient census.

5. Perception: Direct acquaintance with anything through the senses. The link between the stimulus and the environment and a person's response to the stimulus and the environment.

6. Primary Nursing: One modality of delivering nursing care to achieve comprehensive, continuous patient-centered care. The primary nurse, a registered nurse, is accountable and responsible for planning and evaluating the total care for assigned patients. The plan of care is formulated by the primary nurse in collaboration with other members of the health care team and is communicated through the written Nursing Care Plan. The nursing process is utilized by the primary nurse to assess, define, and initiate interventions for patient and nursing problems. The associate nurse, an RN or LPN, renders care under the direction of and in cooperation with the primary nurse by following the written Nursing Care Plan.

7. Quality of Care: The degree of excellence that is rendered in the actual service or care for patients.

8. Satisfaction: The state of being content or serene.

9. Team Nursing: A method of delivering patient care based upon the premise that a small group working together, guided by the nurse leader, can give better patient care than these same individuals can if working alone. Team nursing requires the delegation of various duties and care according to the abilities of the staff and the needs of the patients. It gives the nurse-leader an opportunity to learn how to solve problems, both staff and patient, and encourages staff cooperation by recognizing the contributions each team member can make to the patient.

## Assumptions

1. Patients have a right to evaluate their health care.
2. Patient's evaluation will assist in determining the quality of nursing care delivered.
3. Attitudes of nurses and patients are measurable.
4. Perceptions of nurses and patients are measurable.
5. Care givers' attitudes can influence the patients' perceptions.
6. Nurses practicing team nursing elected to work on a team nursing unit.
7. Nurses practicing primary nursing elected to work on a primary nursing unit.

# CHAPTER 2

## REVIEW OF THE LITERATURE

The following information was compiled from a review of the literature. This review of the literature focuses on nurses' attitudes related to job satisfaction and job stress, and secondly, patients' perceptions of their nursing care and preparation for discharge.

### Nurses' Attitudes

Job satisfaction and job stress affect the attitudes the nurse has about her job. The indicators of satisfying work are nebulous and often difficult to specify.

The earliest study of job satisfaction in nursing, conducted by Nahm (1940), revealed that the most important factors differentiating satisfied and dissatisfied groups of nurses were general adjustments of the individual, relationships with superiors, family and social relationships, hours of work, income, and opportunities to advance and attain goals.

Bullock (1953) studied the position, function, and job satisfaction of nurses in the social system of a modern hospital to gain clues to factors related to the job satisfaction of nurses. He found that the dissatisfactions appeared to be associated chiefly with social and organizational relationships rather than with technical functional relationships.

More recent research on job satisfaction of nurses was carried out by Simon and Olson (1960). Their investigation involved comparing attitudes of nursing personnel on an experimental ward with attitudes of other personnel on the same service. Changes that had been made on the experimental ward included augmenting the nursing staff, introducing team nursing, and conducting an in-service education program. The results of this survey indicated no difference between the experimental ward and the rest of the surgical service in terms of mean index of job satisfaction; however, nurses ranked "a good chance to do interesting work and opportunity to do good patient care" as among the most important factors in their jobs.

Other authors have written about the same subject. Vroom (1964) showed that turnover often resulted from inadequate rewards and incentives. Katz (1964) determined that, if an individual desires the rewards offered by an organization, he will be motivated to work for that organization.

Recent studies have indicated that performance is related to satisfaction of specific psychological needs. Since nurses represent a professional group assumed to be motivated by internalized values, it is important to review the theory of hierarchy of need prepotency established by Maslow. Maslow (1954, 1970) is probably the most well-known authority on the concept of the hierarchy of needs. His theory states that there are basic or primary needs, such as food and water, that an individual satisfies first (at least minimally), after which he turns his attention to the so-called higher-order needs, such as those for

affiliation, nurturance, and esteem. Finally, if some individual has achieved some degree of satisfaction of those first-order and middle-order needs, he may spend effort on trying to satisfy the highest-order need, that of self-actualization. Maslow proposes that employees continually seek to satisfy needs.

Herzberg, Mausner, and Snyderman (1967) have made a significant methodological contribution to the study of factors related to job satisfaction. They developed a semistructured interview schedule, which they used to elicit from 200 accountants and engineers the event that led them to feel exceptionally satisfied or exceptionally dissatisfied about their jobs. A dual-factor theory of job satisfaction was developed which proposed that the job attitudes are not the obverse of each other. Job satisfaction and job dissatisfaction are two distinct dimensions. An individual may experience varying degrees of job satisfaction and job dissatisfaction simultaneously. Herzberg et al. applied their test to 17 populations of workers occupying various job levels. In 97 percent of the cases, the results supported the two-factor theory. They concluded that factors which lead to satisfaction, namely, achievement, recognition, work itself, responsibility, and advancement, describe a person's relation to what he does -- to the job content -- and his ability to grow from task capability. These factors contribute minimally to job dissatisfaction. The dissatisfiers, company policy and administration, supervision, interpersonal relationships, working conditions, salary, status, and security, describe the worker's relationship to the environment in which he does his job. Because these factors contribute

minimally to job satisfaction and serve only as preventives, Herzberg et al. (1967) labeled them hygiene factors. They termed the satisfiers as "motivators," because they contended they are necessary for enhancing performance. Hygiene factors meet the need to avoid unpleasantness, but motivator factors serve the basic human need to become more competent. Herzberg et al. assert that administrators who manipulate hygiene factors can prevent dissatisfaction, but that their efforts will not increase productivity, decrease absenteeism, or decrease turnover (Herzberg et al., 1967).

Ullrich (1978) interviewed 40 nurses in a private general hospital to determine if Herzberg et al.'s dual-factor theory can be used to explain problems encountered in managing nurses. He found that individuals experience satisfaction when they have achieved, or are in the process of achieving, those things to which they aspire. Dissatisfaction results when they are unable to define their aspirations. Thus, an alternative explanation of the findings typically generated by Herzberg et al.'s methodology was suggested. Desired intrinsic factors are attainable and, hence, are generally reported in connection with job satisfaction. Extrinsic factors are more difficult to attain and, thus, tend to be associated with dissatisfaction. However, one must further observe that: 1) poor extrinsic factors, such as technical supervision, can inhibit attainment of intrinsic factors, such as achievement; and 2) intrinsic or extrinsic factors that exceed aspiration levels can result in oversatiation. Both conditions are likely to produce additional dissatisfaction. He suggested that a structural reorganization

of work in hospitals may alleviate part of the problem. The form of the organization should match task requirements with individual aspirations and limitations, enabling tasks and associated responsibilities to be shared when the demands of the job exceed the individual's abilities, and permitting and encouraging two-way communication between nurses, administrators, and supervisors.

Seybolt, Pavett, and Walker (1978) explored the reasons for turnover among nursing personnel at a large, university hospital. The goal of the research was to reduce the negative impact on the quality of patient care resulting from the loss of competent personnel. They surveyed attitudes of 242 nurses in an attempt to define underlying factors that influence turnover. The authors hypothesized that the responses of those leaving to the survey items would differ significantly from the responses of those who remained with the hospital.

The study utilized a model of motivation and behavior similar to that used by Brief (1976). The model was based on Vroom's (1964) expectancy theory which suggests that individual behavior is determined by: 1) the motivation of the individual, 2) the level of ability of the individual, and 3) the individual's role perception. The authors showed how a theoretical model can be operationalized to offer practical suggestions in dealing with turnover.

The survey probed the attitudes of staff members toward many aspects of their work. The major constructs identified were satisfaction, mobility, and performance. These terms were operationally defined and were measurable based on the established criteria. Performance was

defined as individual behavior determined by the motivation, ability, and role perceptions of the individual. The motivational component was further defined into variables of expectancy, valence of outcomes, valence of performance, and instrumentality of performance. Satisfaction was depicted as a result of performance, reward, and perceived equity of reward. Mobility or the ability to change jobs was defined as the third predictor of turnover rates in this model.

A random sample of 10 percent of the nursing staff was interviewed to help define the potential issues they considered important. Analysis of data revealed that the responses of those leaving to the survey items differed significantly from the responses of those who remained with the staff. The nurses in the study indicated that their motivation to leave was dominated by a frustration of their needs for growth and development on the job. They saw no point in working hard since it would not lead to the outcomes they valued, outcomes mostly concerned with growth-need satisfaction.

McCloskey (1974) studied the influence of rewards and incentives on staff nurse turnover rates. The incentives were grouped in categories of safety, social, and psychological rewards. The study population was limited to full-time registered nurses in staff positions in general medical-surgical hospitals who had left jobs during the previous four months. A three-part questionnaire was mailed to 152 nurses from randomly selected hospitals in Chicago and San Francisco. One hundred questionnaires or 67 percent of the questionnaires were returned. The author developed the questionnaire which met the criteria for face

validity and reliability, determined by the test-retest method. The seven hypotheses of the study were: 1) younger nurses leave the job sooner than older nurses; 2) single nurses stay on the job longer than married nurses; 3) married nurses whose spouses make under $10,000 per year leave jobs sooner than nurses whose spouses make over $10,001 per year; 4) diploma nurses stay on the job longer than baccalaureate nurses; 5) nurses who were highest paid in their last nursing job stayed on the job longer than those who were lower paid; 6) among nurses, new graduates leave jobs sooner; and 7) a nurse's specialty area influences the length of time she stays on the job. The Chi-square test was used to test these hypotheses. To determine if there was a statistically significant difference between the three groups of reward scores and the two groups of self-esteem scores, the t- and F-ratio tests were used. The level of significance was set at 0.05.

The results revealed that psychological rewards were more important than safety or social rewards in keeping nurses on the job. Younger nurses and new graduates had the highest turnover. Single nurses stayed no longer than married nurses and the amount of the spouse's income did not affect turnover. There was no difference between diploma and baccalaureate nurses. Higher pay did not keep a nurse, nor was the nurse influenced by a specialty area. Most nurses wanted opportunities to attend educational programs, continue course work for credit and career advancement other than promotion to the head nurse position, and recognition of work from peers and supervisors.

Self-esteem was found to be the core psychological need and, if that need was not satisfied, high turnover resulted. Self-esteem was maintained through recognition of work by peers and supervisors. The unanimous choice of psychological rewards over safety and social rewards strongly indicates that nurses left jobs for lack of internal rewards and that the decision to leave would have been different had these psychological rewards been present. Conversely, these same nurses listed salary, hours, and fringe benefits as most important attractions when they considered a new job. External rewards may draw a person to a job, but internal rewards keep him there and stimulate him to do good work. The implications for nursing drawn by the author are that nursing service administrators: 1) attempt new forms of nursing care in order to provide a more positive work atmosphere, 2) provide a more intellectual atmosphere, 3) allow the nurse to have more decision-making power, and 4) try innovative approaches to fringe benefits. The author also suggests that the philosophy and objectives of team nursing or primary nursing be emphasized to make the nurses aware of what their role is in each of these modalities of care.

There have been a number of authors reporting on aspects of job satisfaction of new graduates but probably none as well known as Kramer (1974). She has worked for the past ten years on identifying the initial work experiences of new graduates and their feelings about nursing.

Kramer (1969) examined the attitudes of 79 graduates of college programs six months after employment and again two years later. The

data showed that as time increased their responses remained emotionally charged, but that the nurses adapted to their work situations. These nurses showed at that time a significant decrease in professional role conception. The initial study began in June 1966 which measured the effects of employing organizations on the role conception (beliefs and values about the nurse's role) and role deprivation (the reported discrepancy between the nurse's role as it should be and as it was actually found to be) of generic baccalaureate graduates. Results of the initial study indicated that there is a significant increase in bureaucratic role conception after exposure to the employing institution. There was a continued drop in the professional role conception scale scores during the first six months.

The follow-up study two years later yielded 63 responses, or 79.7 percent of the original sample. There was a slight decrease in the mean bureaucratic scale score, but it was not statistically significant. There was a highly significant decrease in professional role conception scores. The study suggested that perceived satisfaction in the work experience had something to do with the nurses' desire to remain in nursing. These nurses settled for less than they had aspired to and were not satisfied with the care they were delivering.

Kramer is of the opinion that this situation will affect patient care (Kramer, 1974, p. 219):

> Ultimately, all activity must be measured against the criterion of improved patient care and most assuredly the care will be different and also less effective if it is agreed that the climate and the milieu that surrounds the patient (the nurse being part of that climate), is instrumental to his health maintenance and recovery process. The effect of the nurse is easily perceived by patients.

Harrington and Theis (1968) studied the differences in the perceptions of nurses who were employed at Loeb Center for Nursing as compared with nurses who were employed in two "typical" hospitals, regarding the institutional conditions and requirements that help or hinder them in carrying out the functions of nursing. Three aspects of the nurse's functions were explored: 1) the nurse's perceived ability to carry out the function, 2) the institutional conditions and requirements that the nurse perceived as helping or hindering her in the performance of the function, and 3) any action the nurse might have taken to improve her ability to carry out the function.

Analysis of the data revealed that the subjects at the two "typical" hospitals did not differ significantly in their responses. The responses were combined and compared to the responses from Loeb Center. Both groups identified the following institutional factors as influencing their functioning: 1) attitude and expectations of administrative and supervisory personnel, 2) the nature of the work assignments, and 3) the quality and amount of work-related communication. The nurses in the "typical" setting identified the majority factors within their working environment as deterrents (59.2 percent). Nurses at Loeb Center identified the majority factors in their work environment as helpful to them in carrying out the professional nursing function (85.1 percent). The Loeb nurses felt the attitudes and expectations of administrative personnel created a climate that permitted and encouraged the nurse to perform the functions of professional nursing. The factors that were deterrents in the "typical" hospital were found to be

perceived positively at Loeb Center. Loeb Center was the forerunner of primary nursing and although the two "typical" hospitals were purported to be practicing team nursing, they were actually practicing functional nursing. The team leaders at the two "typical" hospitals were reduced to the medication and treatment nurse which obviously decreased the level of satisfaction for these nurses.

In summary, the factors that influence the nurse to remain with or to leave an organization are difficult to identify. Even though there has been an enormous amount of research conducted that pertains to job satisfaction, the factors that influence a person's intent to remain with an organization remain nebulous. Most of the literature indicates that educational programs, career advancement, recognition of work, shift rotation, job skills assistance, work schedules, and administrators are factors that influence a person to remain with or to leave an organization.

Hospitals, in general, are stressful places in which to work (Michaels, 1971; Cleland, 1965; Jones, 1962; Bilodeau, 1973; Dossett, 1978; Sheridan and Vredenburgh, 1978; Huckabay and Jagla, 1979). The rapid change and diverse stimuli that characterize the modern hospital are extremely stress-producing and result in symptoms ranging from anxiety and hostility to physical illness, depression, and apathy (Colls, 1975).

Stress, as used in this context, is defined as a situation which places an adjustment demand on the individual, one which threatens his equilibrium. Stress arouses anxiety, which is defined as a state of

tension and distress akin to fear, but produced by threatened loss of inner control rather than external danger (Hofling, Leininger, and Bregg, 1972).

Menzies (1960) mentioned that situations which cause anxiety in the nurse are stressful. Stressful work involves the carrying out of tasks which, by ordinary standards, are distasteful, disgusting, frightening, or frustrating. These tasks generate strong and mixed emotions in the nurse such as pity, compassion, love, guilt, or hatred of the patient who has aroused those feelings, and envy of the care that the patient is receiving.

Huckabay and Jagla (1979) interviewed 46 staff nurses in an Intensive Care Unit (ICU) to identify origins of stress. The authors believed that stress decreases efficiency, morale, work performance, and ultimately affects patient care. Situations pertaining to the physical workload, death of a patient, and communication problems with physicians and nursing administration were ranked most stressful. The authors wanted to identify and control the true origins of stress in the ICU. They suggested that the resultant improved nursing performance leads to a consistent level of optimal patient care.

Cleland (1965) conducted a field experiment using registered professional nurses as subjects and measured their nursing test performance under conditions of graduated levels of situational stressors. She found that there is a curvilinear relationship between motivation and performance. Subjects reach maximum performance on difficult test items at a lower stressor condition than for the less difficult items.

Jones (1962), in her article on support for the nurse, mentioned that everyone has his own reactions to stress. Although it is necessary for each nurse to know her own reaction pattern, this is not easy to do and may cause anxiety. Nurses seem to put up barriers to the feelings of sadness, anger, anxiety, or despair. Numerous personal fears act as barriers: the fear of not being accepted; the fear of being thought of as weak, incompetent, unstable, or incapable of handling the job; the fear of being reprimanded for having negative feelings; and the fear of being misunderstood. In addition, Jones pointed out that, in order for the nurse to give support to the patient, the nurse must receive some type of support from someone.

Claus (1978) has been participating in a Stress Management program for the past year. The Stress Management Project is a three-year, federally funded demonstration training grant administered by the School of Nursing at The University of California, San Francisco. The goals of the project are to develop the following end-products: 1) a firm knowledge base on stressors affecting ICU nurses, 2) tested procedures and techniques to manage and reduce these stressors, and 3) stress management training packages for use in staff development and in-service programs in ICU settings. Thus far, the researchers have identified five broad categories of stressors: knowledge and skill development, problems in managing the unit, the nature of direct patient care, interpersonal conflicts, and the physical work environment. The benefits of the project are to assist the nurse in coping with job-related stressors and in deriving greater satisfaction from her work. Increased job

satisfaction and more controlled stress levels should lead to improved patient care and greater mutual support among nurses, physicians, adjunct health workers, patients, and their families.

In summary, hospitals are stressful places in which to work. The individual who experiences stesss, exhibits decreased efficiency, low morale, and poor work performance. The factors that influence stress in the hospitals are now being identified.

## Patients' Perceptions of Nursing Care

The literature review performed by the investigator revealed very few studies which speak directly to patients' perceptions of their nursing care and preparation for discharge. However, the need to develop defensible methods and procedures to measure the effects of nursing care on the client's health and illness status is well-documented (Bloch, 1975; Hasslemeyer, 1962; Johnson, Johnson, and Dumas, 1970; Johnson and Martin, 1975; Majesky, Nishio, and Brester, 1978).

Aydelotte and Tener (1973) stated what the nurse does for the patient and how she does it has a marked influence on the way a patient responds to illness. A causal relationship exists between the care the nurse provides for the patient and the patient's recovery.

Daeffler (1975) conducted a study to compare patients' perceptions of care under team nursing and primary nursing. She believed that because the patient is the consumer of nursing care he is a valuable source of information about nursing practice. The problem under investigation was: Is there a difference in identified omissions in care as perceived by patients on medical-surgical units under two different

patterns of care? The sample consisted of 52 patients on a unit where team nursing was practiced and 30 patients on a unit where primary nursing was practiced. Patients' perceptions were measured by a checklist developed by the Division of Nursing Resources of the U.S. Public Health Service. The checklist consisted of 50 items representing situations that might have occurred during hospitalization and was administered after 36 hours of hospitalization.

Analysis of the data revealed that, in all six categories, omissions in care were higher in the team nursing group. However, the difference was statistically significant in the dietary needs category only. The differences in satisfaction with care between the team nursing and primary nursing groups were less impressive in their statistical measurements than in their consistency, in the comments on the checklist, and in the many spontaneous remarks by patients to the investigator during the data collection period. The primary care group was clearly more satisfied with the care delivered than the team nursing group.

In view of the results of the study, Daeffler (1975) recommends that the care delivery system be primary nursing. She does point out that principles of primary nursing should not be violated. The implementation of team nursing twenty years ago was a promising adventure; the same team nursing, however, has been associated with many practices in which the principles of team nursing are violated.

Daeffler's study is an excellent example of evaluation; however, the research did have several weaknesses such as tool validity and

mismatched units. The study should be replicated to determine if the results were valid.

Risser (1975) developed an instrument to measure patients' satisfaction with nurses and nursing care in the primary care setting. The author believed that evaluation of health care services from the patient's point of view takes on additional significance when the implications of perception theory are considered.

Donabedian (1969) pointed out that the patient and the provider of health care services may differ significantly in their perception of what quality care is, and to what extent it is present. For these reasons, only when evaluation of health care services from the patient's perception is added to other methods, will a realistic concept be obtained.

Marran (1975) gave a detailed description of outcomes for the patient by comparing perceptions of care under primary and team nursing. Replies indicating "extremely satisfied" with care received on the primary unit comprised 65 percent of the total, compared to 37 percent on the team nursing unit.

Nehring and Geach (1973) discovered that patients were reluctant to make negative or critical comments about the care they received. However, they go on to say that "we cannot rely on an indefinite continuation of public acquiescence to nurses' supposed benevolent omnipotence" (Nehring and Geach, 1973, p. 321).

Ciske (1974a) reported on an experimental project begun at the University of Minnesota Hospitals. The intent of the project was to

examine the existing systems in the delivery of care by nursing and other hospital departments. The hospitals were utilizing team nursing as a method of care delivery. However, their particular brand of team nursing seemed to perpetuate deficiencies in the acceptance of responsibility for care planning and follow-through on many of these units. Upon evaluating the situation, the investigators began to realize how unrealistic their expectations were of the registered nurses. The hospitals were asking registered nurses, often newly graduated from any one of three kinds of educational programs, to: 1) know and act upon the critical information obtained from the patients in order to plan their care; 2) lead other team members, which included assigning, supervising, and teaching licensed practical nurses, orderlies, and aides; and 3) observe and evaluate the care delivered to the patients.

The investigators devised a new method of nursing care similar to the method developed and utilized at Loeb Center for Nursing and Rehabilitation in New York City. The system was based on the following concepts: 1) assignment of each patient to a specific (primary) nurse, who usually provides his care each day she is on duty until the patient's discharge or transfer; 2) patient assessment by the primary nurse, who plans the care to be given when she is not on duty, when secondary or associate nurses care for her patients; 3) patient involvement in the care provided and identification of his goals relating to how the medical condition affects his life-style; 4) care giver-to-care giver communication, both in the nursing staff's daily reporting methods and

between disciplines; and 5) discharge planning, including patient teaching, family involvement, and appropriate referrals.

The outcomes of the project were: 1) staff enthusiasm toward patient care and a feeling of accomplishment with their patients; 2) awareness of the strengths within the group for teaching and supporting each other; 3) decrease in the turnover rate of RNs and LPNs; 4) decrease in patient stereotyping by nurses as "difficult" or "demanding," with corresponding decrease in frustration and in staff/patient struggle for control; 5) patients' and families' gratitude for having one nurse in charge of their care and coordinating other staff efforts; 6) positive reports from nurses who "float" to primary nursing units; 7) development of better systems of communicating with agencies following patients after discharge; 8) ten other units adopting the primary nursing structure; and 9) interest in primary nursing by hospitals and schools of nursing in the community.

Ciske (1974a) does believe that primary nursing is not a panacea. Primary nursing will not cure incompetent nursing practices or change staff attitudes about how much of themselves they are willing to give in relationships with patients or with other staff members.

Another evaluation of primary nursing was decribed by Ciske (1974b). Nurses were asked: "Does primary nursing facilitate what nursing has to offer?" Although the study was not a formal research project, the evaluation presents observations of staff satisfaction, patient care, and patient satisfaction. The nurses expressed several advantages of the primary nursing. They said they knew more about their

patients, knew them better as persons, and were more involved with them. Ciske observed that care plans and patient interaction had improved and that communication with patients and other health professionals had become more direct and clear. Turnover rates, when tabulated after two years, were dramatically lower on the primary nursing units than on the team nursing units.

A questionnaire was utilized to determine patients' evaluations with care. Unexpected problems arose with the survey design. The questionnaires were not coded per unit and many patients failed to remember what unit they had been discharged from. When the data were analyzed, the difference to only one question was statistically significant. Patients from the primary nursing units reported that nurses provided more opportunities for the patients to talk about their complaints or problems. The investigators were primarily interested in studying patients' reactions to primary nursing and were disappointed that the patient-satisfaction index did not reflect more of a difference. The investigators do believe that the quality of care under primary nursing demands further evaluation.

In summary, patients' perceptions of their nursing care are just now coming of age. Researchers are beginning to realize the wealth of information that can be obtained from patients.

# CHAPTER 3

# METHODOLOGY

In this section are described the research design of the study, the setting, the population and sample, data gathering instruments, data collection, and proposed analysis of data.

## Research Design

A comparative descriptive design was used to evaluate and compare: 1) patients' perceptions and satisfaction toward their nursing care and preparation for discharge; and 2) nurses' perception and attitudes toward job satisfaction and job stress under two methods of nursing assingment -- primary nursing and team nursing.

## The Setting

The research study was conducted in a 579-bed community hospital located in the southwestern United States. This institution was interested in developing a data base to compare patients' perceptions and satisfaction, nurses' job satisfaction and job stress, quality of nursing care, and patient outcomes. The goal was that this research would assist the hospital in evaluating the care delivery system and the care delivered. The units selected for the study were a 38-bed primary nursing unit which had been operational for ten months and a 37-bed team nursing unit which had been operational for eight months. The two units

were newly constructed and were designed in a similar manner. Each unit had a comparable number of private and semiprivate rooms.

The team nursing unit was staffed according to the following projected figures: census, 32; occupancy, 85 percent; nursing care hours, 5.8; average acuity, 3.5. A complement of three teams provided care for the patients. The staff of each team consisted of one registered nurse (the team leader) and two ancillary personnel, either a registered nurse, a licensed practical nurse, a nurse assistant, or two nurse assistants. The teams were divided according to the unit design. A team consisted of 10, 12, or 14 patients. The patient population consisted of medical and surgical conditions.

The primary nursing unit was staffed according to the following figures: census, 32; occupancy, 85 percent; nursing care hours, 5.7; average acuity, 3.5. The staffing complement consisted of one registered nurse assigned to five or six patients. The registered nurse was assigned two patients for which she acted as the primary nurse and three to four for which she acted as the associate nurse. The licensed practical nurse was assigned five to six patients which were less acute for which she acted as the associate nurse. The two nurse assistants aided the licensed practical nurses and the registered nurses in the delivery of care. The patient population consisted of medical, surgical, and neuromedical conditions.

## Sample

Twenty patients and twenty-five nursing staff from one unit utilizing primary nursing and twenty patients and twenty-five nursing staff from one unit utilizing team nursing were included in this study.

The following criteria were utilized to select nursing and patient participants for the study. Criteria for selection of the patient sample were that the subject be: 1) willing to answer a questionnaire regarding his personal evaluation of his care, 2) aware that the evaluation would be anonymous, 3) mentally alert and oriented, 4) literate in English and English-speaking, and 5) able to answer a checklist. Criteria for subject selection of the nurse sample were: 1) literate in English and English-speaking, 2) willing to answer a questionnaire regarding job satisfaction and job stress, and 3) employed on the units being tested for a period of 60 days prior to the testing.

## Limitations

1. The patients were not randomly selected; therefore, no generalization could be made to a larger population.
2. The data were only collected at one community hospital.
3. The nursing staff was not randomly selected; therefore, no generalization could be made to a larger population.
4. Patients' age, length of hospital stay, and diagnosis were not controlled.
5. The nurses' patient load was not entirely equal under the two modalities.
6. The nurses' sample consisted only of female nurses.

7. Correlation between specific nurses and patients was not possible due to the need for anonymous responses.
8. The leadership styles of the head nurses varied considerably and, therefore, the difference in management style may have influenced the results.
9. The primary nursing unit had not been able to fully implement primary nursing due to position vacancies.

## Data Collection Instruments

### Patient Perception and Satisfaction Scale

The Risser (1975) instrument was used to measure patients' perceptions and satisfaction with nursing care. The instrument was modified by Hinshaw and Atwood (1979) for use in the acute care setting.

The instrument fulfilled the criteria for face and content validity and also provided some evidence of construct validity. Each subscale possesses a reliability coefficient greater than it correlation coefficient with another subscale. The high intersubscale correlation suggested treatment of all items as one scale, with three subdivisions of content areas of the same attitude. This was based on the statistics obtained for the second trial in which the homogeneity ratio of the combined 25 items was .302 with the reliability coefficient by .912. Of the three subscales, subscale I (technical-professional content domain) evidenced the least reliability. In trial II, Cronbach's (1951) reliability coefficient for the seven items was .637 (N = 60). This level was determined acceptable but approached neither the desirable level of

at least .800 nor the reliability coefficients attained by the other two subscales. Reliability coefficients provided indices of test internal consistency, but not of stability of the test over time. Neither equivalent for nor test-retest coefficients were calculated, although Shaw and Wright (1967) suggested that the various reliability procedures yielded quite similar estimates of reliability (Risser, 1975).

The tool consisted of 24 items, subdivided into three categories, to which respondents indicated agreement to disagreement in five Likert-type steps. "A Likert-type attitude scale is a summated scale consisting of a series of statements or items which the subject is asked to react to along a continuum" (Palmer, 1965, p. 100). The scale results in the conversion of qualitative facts into a quantitative series and is used to make discriminations of degree rather than quality (Palmer, 1965).

The tool consisted of a five-point scale and the options included: strongly agree (5 points), agree (4 points), uncertain (3 points), disagree (2 points), and strongly disagree (1 point). The three categories were:

1. Technical-Professional Content Domain -- behavior of the nurse which fulfills instrumental or goal achievement functions; for example, physical care of patients, knowledge of the nurse, expertise in implementing care.
2. Educational-Relationship Content Domain -- skills which refer to the information exchange between nurse and patient; for example, answering questions, explaining, demonstrating.

3. Trusting-Relationship Content Domain -- skills which refer to verbal and nonverbal communication measures; for example, interest in the patient, sensitivity to people and their feelings, listening to patients' problems.

The scale was scored according to the equal-appearing interval method. This method treated all responses as though the distance between the responses was equal and the weights uniform for all items.

Patient Preparedness for Discharge

The second set of statements was taken from Atwood and Hinshaw's (1978) tool. The statements deal with the patient's perception of preparedness for discharge. The scale of responses was a five-point, Likert scale with optional answers ranging from agreement to disagreement along a continuum. The tool consisted of 24 items, subdivided into three subscales: 1) Perception of Preparedness Levels, 2) Specific Care Aspects, and 3) Quality of Care. The categories of each subscale and the corresponding coefficient Alpha's are given in Table 2. The instrument fulfilled the criteria for content validity but had no construct validity.

Nurses' Job Satisfaction Scale

Nurses' job satisfaction was measured with the Slavitt et al. (1978) instrument. The scale, an Index of Work Satisfaction, measured the relative importance of various components. The components of job satisfaction which seemed most relevant to this type of occupation within the health care setting were:

Table 2. Subscales and Coefficient Alpha's of the Patient Preparedness for Discharge Scale.

| Subscale | Coefficient Alpha |
|---|---|
| I. Perception of Preparedness Levels | |
| A. Patient (client) | .93 |
| B. Significant other | .88 |
| II. Specific Care Aspects | |
| A. Medications | .94 |
| B. Treatments | .81 |
| C. Diet/Nutrition | .71 |
| D. Knowledge about disease status | .93 |
| E. General post-discharge care | .77 |
| III. Quality of Care | |
| A. Satisfaction with care in general | .83 |
| B. Informed recipients | .93 |

1. Pay -- dollar renumeration and fringe benefits received for work done.
2. Administration -- effects of administration on job procedures, personnel policy, and the amount of staff participation in making these policies.
3. Interaction -- opportunities and requirements presented for both formal and informal social contact during working hours.
4. Professional status -- generated feelings toward the profession.
5. Doctor-nurse relationship -- amount and type of professional interaction among physicians and nurses.
6. Task requirements -- tasks that must be done as a regular part of the job and the organization of work as it relates to the

amount of time allotted to patient care and the administration of work.

7. Autonomy -- amount of job-related independence initiative, and freedom either permitted or required in daily work activity.

The scale was based on attitudinal measurements of two types of data: qualitative assessment responses to individual items and a qualitative summary score. The score would, therefore, combine the level of perceived satisfaction with the relative importance of the various satisfaction factors. The first section of the measurement instrument measured the relative importance of the various aspects or components of job satisfaction with the respondent through the use of a paired comparison technique (Edwards, 1970); the second section measured the respondents' current levels of satisfaction through a Likert-type attitudinal scale.

The instrument fulfilled the criteria for face or surface validity based on factor analysis. The proof of validity rested on the similarity between results within the two hospital units tested and the general findings of job satisfaction from the literature. Internal validity of the questionnaire was determined by the use of Cronbach's (1951) coefficient Alpha (Slavitt et al., 1978).

Reliability for the 72-item original test was .93, and for the 48 items chosen by factor analysis it was .91. The 48 items suggested high reliability and each item measured the general concept of the questionnaire; job satisfaction and the high intrascale reliability

suggested that each item within the scale measured that particular aspect of job satisfaction.

### Nurses' Job Stress Scale

Nurses' job stress was determined by the Claus (1978) instrument which was adapted by Hinshaw and Atwood (1979). The tool consisted of a four-point scale and the options included: almost always (1 point), frequently (2 points), occasionally (3 points), and rarely (4 points). Numerical values were reversed for negatively phrased items. There were five subscales for the 45 statements. These included: 1) knowledge and skill, 2) patient care, 3) physical work environment, 4) management/ administration, and 5) interpersonal relations.

Since this tool was still being tested, there was minimal information available regarding the accuracy of the tool in terms of validity and reliability; therefore, these cannot be described.

## Data Collection

### Patient Data

Patients that were hospitalized on the primary and team nursing units were approached on the day of discharge and were asked to participate in the study. Explanation was given that the responses to the type of nursing care they had been receiving would be helpful in planning future care. Patients were told that their participation was voluntary. Those individuals who agreed to participate were informed that they were giving their consent by responding to the statements on the

questionnaires. They were told that their names would remain confidential and would not appear on the questionnaires.

Data were collected until the sample size was met. The investigator was present only on the day of dismissal and was available to answer any questions during the completion of the questionnaires.

Nurses' Data

The nursing personnel on the two units were approached and asked to participate in the study. They were told that the investigator was interested in ascertaining their attitudes toward their job, job stresses, and involvement with patients. The staff was told that their participation was voluntary. Participants were assured that all data would be used for the stated purposes of the study. The nursing personnel were informed that by responding to the statements on the questionnaires they were giving their consent. The participants' names were not on the questionnaires, but the participants were asked to indicate their job level. The questionnaires were coded numerically.

## Protection of Human Rights

This study was submitted to the Human Subjects Committee of The University of Arizona and also to the Department of Staff Development and Research at the clinical facility used in this study (see Appendix E).

Only persons who consented to participate in this study were used. The purpose of this study was explained to each person, including the right to withdraw from the study at any time without consequence.

The confidentiality of the information obtained was assured by assigning each person a code number only.

## Analysis of Data

Means and standard deviations were obtained for the three subcategories and on the total score of the Patients' Perception Scale. Likewise, the same was done on the preparation for discharge, the nurse job satisfaction, and job stress scales. The t-test was done to determine the level of significant differences at a 0.05 level between the patients on the two units, and also between nursing staffs on the units. The patients' satisfaction scores and the nurses' satisfaction scores on each unit were compared to determine if either assignment modality increased satisfaction.

# CHAPTER 4

## PRESENTATION OF DATA

In this chapter are described the characteristics of the sample, patients' perceptions of their care and preparation for discharge, and nurses' job satisfaction and job stress. The findings and statistical analysis of the data were related to the hypotheses.

### Characteristics of the Sample

#### Patients

The sample of patients in this study consisted of 20 individuals who received care on a primary nursing unit and 20 individuals who received care on a team nursing unit. The mean age of patients in the sample was 60.9, with a range of 24 to 91 years (Tables 3 and 4). There were 12 female and 8 male participants on the primary nursing unit, and 13 female and 7 male participants on the team nursing unit (Table 5).

Forty-seven patients were contacted by the investigator. Seven patients, three on the primary nursing unit and four on the team nursing unit, refused to participate in the study.

No attempt was made to control the length of hospitalization, the number of hospitalizations, or the medical diagnosis of any of the patient participants.

Table 3. Distribution of Patients by Age on the Primary Nursing Unit (Group I) and on the Team Nursing Unit (Group II).

| | Age | | | | | | |
|---|---|---|---|---|---|---|---|
| | 24-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-85 |
| Group I | 0 | 1 | 2 | 6 | 4 | 6 | 1 |
| Group II | 2 | 1 | 0 | 5 | 5 | 6 | 1 |

Table 4. Means and Standard Deviations of Patients' Age on the Primary Nursing Unit (Group I) and on the Team Nursing Unit (Group II).

| Variable | Group | No. of Cases | Mean | Standard Deviation |
|---|---|---|---|---|
| Age | I | 20 | 60.30 | 10.90 |
| Age | II | 20 | 61.50 | 14.49 |

Table 5. Distribution of Patients by Sex on the Primary Nursing Unit (Group I) and on the Team Nursing Unit (Group II).

| | Sex | | |
|---|---|---|---|
| | Female | Male | Total |
| Group I | 12 | 8 | 20 |
| Group II | 13 | 7 | 20 |

### Nursing Staff

The sample of nursing staff in this study consisted of 25 staff members from the primary nursing unit: 15 registered nurses, 5 licensed practical nurses, and 5 nurse assitants. Twenty-five nursing staff members comprised the sample from the team nursing unit: 13 registered nurses, 7 licensed practical nurses, and 5 nurse assistants. No attempt was made to determine the age, educational preparation, or previous experience of the staff participants in the sample. The distribution of the nurse sample by job level is presented in Table 6.

## Patients' Perceptions

### Patient Satisfaction with Nursing Care

Patients' perceptions and satisfaction with their care on the two units were measured by the Risser instrument. The data obtained were evaluated by examination of the means, standard deviations, and t-values of the individuals' item responses and the total responses for the subscales which comprise the tool. Of the 24 items on the scale, only one item proved significant.

Table 6. Distribution of Nurses' Sample by Registered Nurse (RN), Licensed Practical Nurse (LPN), and Nurse Assistant (NA) for the Primary Nursing Unit (Group I) and the Team Nursing Unit (Group II).

| | RN | LPN | NA | Total |
|---|---|---|---|---|
| Group I | 15 | 5 | 5 | 25 |
| Group II | 13 | 7 | 5 | 25 |

Item 2: "The nurse thought I couldn't understand the explanation of my illness, so he/she just didn't bother to explain." The mean and standard deviation for the patient sample on the primary nursing unit were 4.33 and .49, respectively, while the mean and standard deviation for the patient sample on the team nursing unit were 4.76 and .56, respectively. The level of significance was .04.

After analysis of the items that comprise each of the subscales, there was no statistical difference found at the level of 0.05 when comparing the perceptions and satisfaction of patients receiving care on a primary nursing unit with that of patients receiving care on a team nursing unit. Thus, the first null hypothesis, which stated that the patients' perceptions of nursing care on a primary nursing unit will not differ significantly from the patients' perceptions of nursing care on a team nursing unit as measured by the Risser instrument, was supported.

Nearly all the means of the individual items fell between 4.0 and 5.0, indicative of the similarity of responses given by each of the subjects. This could suggest a halo effect or a methodological problem, yet when Risser tested the instrument the same problem did not occur. The other possible explanation is that each group of patients was extremely satisfied with the care rendered and, thus, no statistical difference would be found for the two groups tested (see Table 7).

Patient Preparedness for Discharge

Patient preparedness for discharge on the two units was measured by the Atwood and Hinshaw (1978) instrument. The data obtained were

Table 7. Mean Scores, t-Values, and Probability of Patient Opinion of Nursing Care Subscales on a Primary Nursing Unit (Group I) and a Team Nursing Unit (Group II).

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| Technical-Professional Skills[a] N = 7 | I | 5 | 4.06 | .30 | .20 | .85 |
| | II | 3 | 4.00 | .43 | | |
| Education-Relationship Skills[b] N = 7 | I | 6 | 4.16 | .44 | -1.80 | .10 |
| | II | 5 | 4.82 | .41 | | |
| Trusting-Relationship Skills[c] N = 10 | I | 14 | 4.28 | .53 | -1.01 | .32 |
| | II | 15 | 4.47 | .52 | | |

[a]Includes items: 11, 12, 14, 15, 17, 19, 24.
[b]Includes items: 2, 7, 8, 10, 16, 20, 23.
[c]Includes items: 1, 3, 4, 5, 6, 9, 13, 18, 21, 22.

evaluated by examination of the means, standard deviations, and t-values of the individual item responses and the total responses for the items that comprise the nine subscales. Of the 24 items in the scale and the items in the nine subscales, there was no statistical difference found at the level of 0.05 when comparing the patient responses from the two units (Table 8). Again, nearly all the individual items' means fell between 4.0 and 5.0, indicative of the similarity of responses given by each of the subjects. The second null hypothesis, which stated that the patients' perceptions of preparedness for discharge on a primary nursing unit will not differ significantly from the patients' preparedness for

Table 8. Mean Scores, t-Values, and Probability of Patient Preparedness for Discharge Subscales on a Primary Nursing Unit (Group I) and a Team Nursing Unit (Group II).

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| Patient Perception of Preparedness[a] N - 18 | I | 3 | 4.33 | .58 | 1.43 | .21 |
| | II | 5 | 3.64 | .23 | | |
| Significant Other Perception of Preparedness[b] N = 5 | I | 12 | 4.18 | .67 | -.11 | .91 |
| | II | 12 | 4.21 | .77 | | |
| Medications[c] N = 4 | I | 10 | 4.33 | .58 | 1.01 | .3 |
| | II | 11 | 4.06 | .69 | | |
| Treatments[d] N = 4 | I | 5 | 4.45 | .45 | 1.53 | .1 |
| | II | 7 | 3.96 | .65 | | |
| Diet/ Nutrition[e] N = 3 | I | 11 | 4.42 | .50 | 1.78 | .09 |
| | II | 13 | 3.84 | 1.04 | | |
| Knowledge about Disease Status[f] N = 7 | I | 6 | 4.40 | .52 | .73 | .4 |
| | II | 9 | 4.13 | .95 | | |
| General Post-Discharge Care[g] N = 3 | I | 10 | 4.30 | .51 | .11 | .91 |
| | II | 10 | 4.24 | .80 | | |
| Satisfaction with Care in General[h] N = 4 | I | 9 | 4.33 | .42 | .41 | .69 |
| | II | 10 | 4.20 | .94 | | |

Table 8, Continued.

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| Informed Recipients[i] N = 15 | I | 6 | 4.74 | .44 | .66 | .52 |
| | II | 8 | 4.52 | .77 | | |

[a]Includes items: 2-7, 9-13, 16, 17, 19, 21-24.
[b]Includes items: 1, 8, 14, 15, 18.
[c]Includes items: 2, 3, 6, 10, 11, 14, 18, 19, 22.
[d]Includes items: 4, 7, 8, 23.
[e]Includes items: 12, 19, 24.
[f]Includes items: 1, 5, 9, 15-17, 22.
[g]Includes items: 13, 17, 20.
[h]Includes items: 2, 13, 16, 17.
[i]Includes items: 1, 3, 5, 6, 8-12, 14-19.

discharge on a team nursing unit as measured by the Atwood and Hinshaw instrument, was supported.

Nurses' Job Satisfaction

Nurses' job satisfaction was determined for the two units by evaluating the means, standard deviations, and t-values of the individual items and of the total responses for the items comprising the seven subscales identified by Slavitt et al. (1978). Of the 47 items in the scale, five items were significant at a 0.05 level.

Item 8: "I have all the voice in planning policies and procedures for this hospital and my unit that I want." The mean for the primary nursing unit was 2.65, with a standard deviation of 1.19. The mean for the team nursing unit was 2.00, with a standard deviation of .82. The level of significance was determined to be .03.

Item 11: "I am sometimes required to do things on my job that are against my better professional nursing judgment." The mean and standard deviation for the primary nursing unit were 2.52 and .226, respectively, while the mean and standard deviation for the team nursing unit were 3.24 and .22, respectively. When the two groups were compared, a significance level of .03 was obtained.

Item 24: "There is a good deal of team work and cooperation between various levels of nursing personnel on my service." The mean of the primary nursing unit was 3.84, with a standard deviation of .90, while the team nursing had a mean of 3.20 with a standard deviation of 1.12. These results demonstrated a level of significance of .03.

Item 32: "The nursing personnel on my service don't often act like 'one big happy family'." The mean and standard deviation for the primary nursing group were 3.52 and 1.16, respectively, while the team nursing unit had a mean and standard deviation of 2.72 and 1.10, respectively. The level of significance for this item was .02.

Item 43: "On my service, my supervisors make all the decisions, I have little direct control over my own work." The primary nursing group had a mean and standard deviation of 4.16 and .64, respectively, while the team nursing unit had a mean and standard deviation of 3.44 and .92, respectively. When the two groups were compared, a significance level of .002 was obtained.

Analysis of the seven subscales -- 1) Pay (Reward), 2) Administration, 3) Interaction, 4) Professional Status, 5) Doctor-Nurse Relations, 6) Task Requirements, and 7) Autonomy -- provided only one subscale, Interaction, that showed a significant statistical difference between the nurses on the primary nursing unit and the team nursing unit. The significance level obtained for this subscale was 0.03. The statistical analysis of the items included in this subscale is reported in Table 9.

Item 12: "New employees are not quickly made to 'feel at home' on my unit."

Item 20: "Nursing personnel at this hospital do a lot of bickering and backbiting."

Item 24: "There is a good deal of team work and cooperation between various levels of nursing personnel on my service."

Table 9. Mean Scores, t-Values, and Probability of Nursing Staff Job Satisfaction Subscales on a Primary Nursing Unit (Group I) and a Team Nursing Unit (Group II).

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| Pay (Reward)[a] N = 8 | I | 21 | 2.01 | .66 | .46 | .65 |
| | II | 20 | 1.92 | .59 | | |
| Administration[b] N = 10 | I | 19 | 2.57 | .92 | .80 | .43 |
| | II | 21 | 2.38 | .58 | | |
| Interaction[c] N = 7 | I | 24 | 3.83 | .58 | 2.19 | .03* |
| | II | 25 | 3.44 | .68 | | |
| Professional Status[d] N = 6 | I | 23 | 4.02 | .68 | .48 | .63 |
| | II | 23 | 3.94 | .55 | | |
| Doctor-Nurse Relations[e] N = 3 | I | 22 | 3.25 | .97 | .57 | .58 |
| | II | 22 | 3.10 | .80 | | |
| Task Requirements[f] N = 6 | I | 21 | 2.13 | .70 | -1.06 | .30 |
| | II | 24 | 2.35 | .60 | | |
| Autonomy[g] N = 5 | I | 20 | 2.76 | .60 | -.89 | .38 |
| | II | 23 | 2.93 | .63 | | |

*Level of significance accepted = $p < .05$.

[a]Includes items: 4, 9, 16, 18, 21, 22, 41, 46.
[b]Includes items: 3, 5, 8, 10, 14, 15, 25, 26, 30, 40.
[c]Includes items: 12, 20, 24, 28, 32, 33, 37.
[d]Includes items: 2, 6, 7, 19, 38, 44.
[e]Includes items: 13, 35, 47.
[f]Includes items: 17, 23, 34, 36, 42, 45.
[g]Includes items: 11, 27, 31, 16, 25.

Item 28: "The nursing personnel on my service don't hesitate to pitch in and help one another out when things get in a rush."

Item 32: "The nursing personnel on my service don't often act like 'one big happy family'."

Item 33: "There is a lot of 'rank consciousness' on my unit, nursing personnel seldom mingle with others of lower ranks."

Item 37: "The nursing personnel on my service are not as friendly and outgoing as I would like."

In summary, the Interaction subscale from the Slavitt Job Satisfaction Instrument was significant at a 0.03 level. The other six subscales, reported in Table 10, did not show any significance. Therefore, the third null hypothesis, which stated that nurses' job satisfaction on a primary nursing unit will not differ significantly from nurses' job satisfaction on a team nursing unit as measured by the Slavitt instrument, was supported.

Nurses' Job Stress

Nurses' job stress for the two units was determined by evaluating the mean, standard deviation and t-values for the 45 individual items on the scale developed by Claus. The five subscales that comprise the scale were also analyzed by utilizing the data arrived at from the means, standard deviations, and t-values, as reported in Table 11. There were five items that were significant.

Item 10: "I am able to keep up with technological advances." The mean and standard deviation for the primary nursing unit were 2.86 and .82, respectively, while the mean and standard deviation for the

Table 10. Mean Scores, t-Values, and Probability from the Interaction Subscale of the Slavitt Job Satisfaction Scale on the Primary Nursing Unit (Group I) and the Team Nursing Unit (Group II).

| Variable | Group | No. of Cases | Mean | Standard Deviation | 2-Tail Probability |
|---|---|---|---|---|---|
| Item 12 | I | 25 | 4.20 | 1.00 | 1.0 |
| | II | 25 | 4.20 | .95 | |
| Item 20 | I | 24 | 2.87 | 1.19 | .33 |
| | II | 25 | 2.56 | 1.04 | |
| Item 24 | I | 25 | 3.84 | .90 | .03 |
| | II | 25 | 3.20 | 1.12 | |
| Item 28 | I | 24 | 4.04 | 1.08 | .10 |
| | II | 25 | 3.48 | 1.23 | |
| Item 32 | I | 25 | 3.52 | 1.16 | .02 |
| | II | 25 | 3.72 | 1.10 | |
| Item 33 | I | 24 | 4.20 | .83 | .84 |
| | II | 25 | 4.16 | .85 | |
| Item 37 | I | 25 | 4.04 | .89 | .33 |
| | II | 25 | 3.80 | .82 | |

Table 11. Mean Scores, t-Values, and Probability of Nursing Staff Job Stress Subscales on a Primary Nursing Unit (Group I) and a Team Nursing Unit (Group II).

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| Knowledge and Skill[a] N = 5 | I | 21 | 3.11 | .46 | .79 | .43 |
| | II | 20 | 3.00 | .46 | | |
| Patient Care[b] N = 13 | I | 18 | 2.72 | .36 | 1.21 | .24 |
| | II | 20 | 2.60 | .23 | | |
| Physical Work Environment[c] N = 2 | I | 23 | 3.07 | .78 | -.07 | .95 |
| | II | 25 | 3.08 | .73 | | |
| Management/ Administration[d] N = 11 | I | 17 | 1.96 | .38 | 1.83 | .08 |
| | II | 16 | 1.73 | .36 | | |
| Interpersonal Relations[e] N = 14 | I | 18 | 2.96 | .44 | .35 | .73 |
| | II | 16 | 2.92 | .45 | | |

[a]Includes items: 10, 12, 18, 37, 45.
[b]Includes items: 8, 14, 16, 17, 21, 25, 26, 28, 33, 39, 40, 41, 44.
[c]Includes items: 29, 35.
[d]Includes items: 1, 2, 5, 7, 9, 19, 20, 22, 27, 31, 42.
[e]Includes items: 3, 4, 6, 11, 13, 15, 23, 24, 30, 32, 34, 36, 38, 43.

team nursing unit were 2.23 and .77, respectively. The level of significance was .01.

Item 11: "A feeling of team spirit exists on my shifts." The primary nursing unit had a mean of 3.32 and a standard deviation of .95, while the team nursing unit had a mean of 2.68 and a standard deviation of .85. The significance level was established at .02.

Item 18: "Working with specialized equipment distresses me." The mean and standard deviation were established at 3.18 and .80, respectively, for the primary nursing group and 3.60 and .50, respectively, for the team nursing unit. A significance level of .04 was obtained.

Item 27: "There is adequate staffing in the unit." The primary and team nursing units had means of 1.87 and 1.29, respectively, with standard deviations of .74 and .55, respectively. A significance level of .003 was obtained.

Item 42: "Staffing permits me to work a satisfying schedule." The mean and standard deviation for the primary nursing unit were 2.41 and .97, respectively, while the mean and standard deviation for the team nursing unit were 1.76 and 1.09, respectively. When the two units were compared, the level of significance was .03.

Analysis of the five subscales -- 1) Knowledge and Skill, 2) Patient Care, 3) Physical Work Environment, 4) Management/Administration, and 5) Interpersonal Relations -- provided no statistical differences between the nurses on the two units, as shown in Table 11. Consequently, the fourth null hypothesis, which stated that nurses' job

stress on a primary nursing unit will not differ significantly from nurses' job stress on a team nursing unit as measured by the Claus instrument, was supported.

## Summary

The t-test significance revealed no significant differences between primary and team nursing when comparing patient perception of nursing care, patient preparedness for discharge, job satisfaction, or job stress of nursing staff members. The four null hypotheses were supported by the findings.

Only the Interaction subscale of the Nurses' Job Satisfaction instrument was found to show a significant different (0.04) when the nurses working on the primary nursing unit and the nurses working on the team nursing unit were compared. Considering the data as grouped items, the means are too close to substantiate the subscale influencing the entire scale.

Comparison was also made of each item within each of the four instruments. Of the two scales used to measure patients' perceptions of nursing care and preparedness for discharge, only item 2 in the patients' perceptions of nursing care was found significant. Five significant items were found both in the nurses' job satisfaction instrument and the nurses' job stress instrument.

# CHAPTER 5

## DISCUSSION OF FINDINGS AND CONCLUSIONS

In this chapter, the findings are discussed in relation to the conceptual framework and the review of the literature. The conclusions of the study are also presented.

### Relationship of Findings to Conceptual Framework and Review of the Literature

The study was designed to determine if specific measures of patients' perceptions of nursing care and preparedness for discharge and specific measures of nurses' job satisfaction and job stress could be shown to differ under two different assignment methodologies. An evaluation perspective was adopted to provide an estimate of the quality of nursing care rendered by the care giver in relation to the modality of care delivery.

Nurses' attitudes do influence the patients' perceptions of nursing care (Felton, 1975; Daeffler, 1975; Ciske, 1974b; Marran, 1975; Estok, 1978; Harper et al., 1972). Several authors believe that, if the nurse's attitudes about the type of care she is giving improves, the patients' perceptions about their care will also improve (Felton, 1975; Daeffler, 1975; Ciske, 1974b). Primary nursing has been shown to positively influence the nurses' attitudes about the care delivered and,

thus, positively influence the patients' perceptions of the care rendered.

Perception is a key concept of human behavior and is a useful concept when evaluating the values of patients in the hospital setting. Perceptions may be influenced by many things over which one has no control (King, 1962). The patients' perceptions were evaluated by the Risser instrument and the Atwood and Hinshaw instrument. Risser (1975) believed that evaluation of health care services from the patients' point of view takes on additional significance when the implications of perception theory are considered.

The findings of this study are opposite to the results described by Daeffler (1975) and Ciske (1974a, 1974b). There were no differences in patients' perceptions of nursing care or preparedness for discharge when comparing primary and team nursing units. Only one item in the two scales showed a significance of 0.034; however, when considering the subscales in the two scales, none were found significantly different.

Most patients believed that the nursing care rendered was good to excellent, as indicated by the high mean scores of 4.0 to 5.0. However, most of the patients believed that the nurse should have very little involvement in teaching them about their illness, diet, medications, and treatments. Sixteen of the 40 patients in the sample chose not to answer items 21a-d on the Patient Preparedness for Discharge Scale.

Item 21: "I am satisfied with the teaching I have received from the nursing staff about my:

a) Conditions.

b) Treatments.

c) Medications.

d) Diet."

The reason that was universally given by these patients was that they considered it the physician's role to teach them about their condition, diet, treatments, and medications. The nurse was there to provide for their physical and social needs, but not for their educational needs.

The study also revealed no significant differences between the job satisfaction and job stress of the nursing staff working on the primary nursing unit and on the team nursing unit. This is in direct contrast to Harrington and Theis (1968) who compared the perceptions of nurses employed at Loeb Center for Nursing (primary care) with nurses employed in two typical hospitals (team nursing). The nurses at Loeb Center believed that their working environment was helpful to them in carrying out their professional nursing function, while the nurses in the typical setting found the working environment largely deterrent. The nurses at Loeb also found that the attitudes and expectations of administrative personnel created a climate that permitted and encouraged the nurse to perform functions of professional nursing.

In this study, only five of the items on the Job Satisfaction questionnaire were significant. Items 8 and 43 both were statements

directed toward administration, items 24 and 32 both were directed toward interaction, and item 11 was directed toward autonomy.

Item 8: "I have all the voice in planning policies and procedures for this hospital and my unit that I want."

Item 11: "I am sometimes required to do things on my job that are against my better judgment."

Item 24: "There is a good deal of team work and cooperation between various levels of nursing personnel on my service."

Item 32: "The nursing personnel on my service don't often act like 'one big happy family'."

Item 43: "On my service, my supervisors make the all the decisions, I have little control over my work."

These findings support most of the research that has been performed relating to job satisfaction. Ullrich (1978) interviewed 40 nurses in a private general hospital. He found that the form or organization should match task requirements with individual aspirations and limitations, enabling tasks and associated responsibilities to be shared when the demands of the job exceed the individual's abilities, and permitting and encouraging two-way communication between nurses, administrators, and head nurses. McCloskey (1974) reported that psychological rewards were more important than safety or social rewards. Seybolt et al. (1978) found that nurses left an organization because of feeling frustrated about their growth and development on the job. The findings do not substantiate which group was the more satisfied because it varies per item.

The findings in the study in relation to job stress did support the null hypothesis. Again, five of the 45 items were significant. Items 10 and 18 were directed toward knowledge and skill, items 27 and 42 were directed toward management and administration, and item 11 was directed toward interpersonal relations.

Item 10: "I am able to keep up with technological advances."

Item 11: "A feeling of team spirit exists on my shift."

Item 18: "Working with specialized equipment distresses me."

Item 27: "There is adequate staffing in the unit."

Item 42: "Staffing permits me to work a satisfying schedule."

These findings do substantiate the literature in that hospitals are stressful places to work (Michaels, 1971; Cleland, 1965; Jones, 1962; Bilodeau, 1973; Dossett, 1978; Sheridan and Vredenburgh, 1978). Stress in this study was shown to be significant when comparing the two units in the areas of knowledge and skill, administration, and interpersonal relations. Huckabay and Jagla (1979) found that stress decreases efficiency, morale, work performance, and ultimately affects patient care.

## Conclusions

The findings in the study did support the four null hypotheses that there would be no difference in patients' perceptions of care or preparedness for discharge and nurses' job satisfaction and job stress when comparing the primary nursing unit and the team nursing unit.

Although the statistical findings substantiate the hypotheses, it is of interest to explore the unrecognized variables that were

occurring at the same time the study was undertaken. Both units were experiencing a period of high occupancy, high acuity, and staffing vacancies. The morale of the nursing staff on each unit was low. Numerous times the researcher heard the staff complain that they were tired from working 9.5 to 10 hours in a scheduled 8-hour day. Often the nursing staff would call in sick/absent during the time research was conducted on the unit.

In addition, there were 108 discharges from the primary nursing unit in the 20-day period of data collection and 78 discharges from the team nursing unit in the same period. Frequently, patients would be admitted within an hour to the bed a patient just left.

The data need to be interpreted in view of those unrecognized and uncontrolled variables. Perhaps the findings are not a true accounting of the differences between primary and team nursing, but a relating of how the nursing staff and patient participants reacted to the unrecognized variables during the study.

# CHAPTER 6

## SUMMARY AND RECOMMENDATIONS

The purpose of this study was to determine if specific measures of patients' perceptions and satisfaction with nursing care and preparedness for discharge could be shown to differ under two nursing care modalities: primary nursing and team nursing. Likewise, a comparison of nurses' job satisfaction and job stress under the two modalities was made. The research problems under investigation were:

1. How does the patient's perception of nursing care and the preparation for discharge on a primary nursing unit differ from the patient's perception of nursing care and preparedness for discharge on a team nursing unit?
2. How does the nurse's job satisfaction and job stress on a primary nursing unit differ from the nurse's job satisfaction and job stress on a team nursing unit?

The problem was significant because: 1) the growing concern by nursing to further evaluate the quality of nursing care rendered was fully documented in the literature; 2) health care consumers were concerned about the most economic, effective, and yet personalized way to receive health services; 3) nurses' dissatisfaction with work experiences and feelings about nursing was a growing concern; and 5) hospital and nursing service administrators were concerned with providing a safe

environment for patients and providing a work situation conducive to effective utilization of personnel.

## Methodology

To compare the responses of patients and nursing staffs under the two assignment methodologies of care delivery, a comparative descriptive design was used. Twenty patients and 25 nursing staff members from both the primary and team nursing unit were included in the study. Each group was asked to complete two questionnaires for a total of four questionnaires being used in the study. The questionnaires included the Patient Perception and Satisfaction Scale, the Patient Preparedness for Discharge Scale, the Nurse Job Satisfaction Scale, and the Nurse Job Stress Scale.

The following criteria were utilized to select nursing and patient participants for the study. Criteria for selection of the patient sample were that the subject be: 1) willing to answer a questionnaire regarding his personal evaluation of his care, 2) aware that the evaluation would be anonymous, 3) mentally alert and oriented, 4) literate in English and English-speaking, and 5) able to answer a checklist. Criteria for selection of the nurse sample were that the subject be: 1) literate in English and English-speaking, 2) willing to answer a questionnaire regarding job satisfaction and job stress, and 3) employed on the units being tested for a period of 60 days prior to the testing.

All results were reported in group form. Questionnaire responses were coded and subjected to computer analysis. Means,

standard deviations, and t-tests were run on all individual items and on the items comprising the subscales. A 0.05 level of significance was set.

## Findings

The null hypothese that were tested were:

1. The patients' perceptions of nursing care on a primary nursing unit will not differ significantly from the patients' perceptions of nursing care on a team nursing unit as measured by the Risser instrument.
2. The patients' perceptions of preparedness for discharge on a primary nursing unit will not differ significantly from the patients' preparedness for discharge on a team nursing unit as measured by the Atwood and Hinshaw instrument.
3. Nurses' job satisfaction on a primary nursing unit will not differ significantly from nurses' job satisfaction on a team nursing unit as measured by the Slavitt instrument.
4. Nurses' job stress on a primary nursing unit will not differ significantly from nurses' job stress on a team nursing unit as measured by the Claus instrument.

The t-test for significance comparing the two groups of patients and the two groups of nursing staff revealed only one significant finding. There was no significant difference in the patients' perceptions of nursing care or preparedness for discharge on the primary nursing unit when compared to the team nursing unit. Analysis of the

Slavitt Job Satisfaction Scale indicated the subjects working on the primary nursing unit were able to interact (work more closely with each other) with each other more so than the nursing staff on the team nursing unit. There was no significant difference found in the nursing staffs' job stress when comparing the primary nursing unit and the team nursing unit.

## Recommendations

Recommendations for further investigation include:

1. Replication of this study using a larger sample, using more than one hospital, and comparing more than two units.
2. Identification of nurses' educational level and recent educational experiences for correlation to the findings.
3. Investigation into the medical diagnosis of patients with the responses to the instruments used.
4. Investigation into the patient's age as a controlling factor in determining satisfaction with nursing care.
5. Replication of the study after the primary nursing unit and the team nursing unit have their full complement of staff.
6. Replication of the study after the primary nursing unit and team nursing unit have been functioning with their full complement of staff for at least six months.

# APPENDIX A

## MEAN SCORES, t-VALUES, AND PROBABILITY OF INDIVIDUAL ITEMS OF PATIENTS' OPINION OF NURSING CARE ON A PRIMARY NURSING UNIT (GROUP I) AND ON A TEAM NURSING UNIT (GROUP II)

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| PO 1 | I | 20 | 4.25 | .72 | -.34 | .73 |
| | II | 20 | 4.35 | 1.09 | | |
| PO 2 | I | 12 | 4.33 | .49 | -2.19 | .04* |
| | II | 17 | 4.76 | .56 | | |
| PO 3 | I | 20 | 4.55 | .51 | -.46 | .65 |
| | II | 19 | 4.63 | .60 | | |
| PO 4 | I | 20 | 4.50 | .51 | -.95 | .35 |
| | II | 20 | 4.65 | .49 | | |
| PO 5 | I | 20 | 4.05 | 1.15 | -1.35 | .18 |
| | II | 20 | 4.50 | .95 | | |
| PO 6 | I | 19 | 4.26 | .65 | -.97 | .39 |
| | II | 20 | 4.45 | .69 | | |
| PO 7 | I | 17 | 4.23 | .75 | -.66 | .51 |
| | II | 18 | 4.38 | .61 | | |
| PO 8 | I | 18 | 4.33 | .59 | .77 | .45 |
| | II | 16 | 4.06 | 1.24 | | |
| PO 9 | I | 19 | 3.84 | 1.34 | -.76 | .45 |
| | II | 19 | 4.15 | 1.21 | | |
| PO 10 | I | 11 | 4.45 | .52 | .16 | .88 |
| | II | 10 | 4.40 | .97 | | |
| PO 11 | I | 7 | 4.00 | 1.00 | -.55 | .60 |
| | II | 4 | 4.25 | .97 | | |
| PO 12 | I | 19 | 4.21 | .98 | -.31 | .76 |
| | II | 19 | 4.31 | 1.11 | | |
| PO 13 | I | 17 | 4.35 | .61 | .71 | .48 |
| | II | 19 | 4.15 | 1.02 | | |
| PO 14 | I | 19 | 4.15 | .96 | -.28 | .78 |
| | II | 16 | 4.25 | 1.00 | | |
| PO 15 | I | 19 | 4.21 | .92 | -.18 | .86 |
| | II | 19 | 4.26 | .93 | | |
| PO 16 | I | 19 | 4.36 | .76 | .83 | .41 |
| | II | 20 | 4.15 | .88 | | |

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| PO 17 | I | 20 | 4.25 | .55 | 0 | 1.00 |
| | II | 20 | 4.25 | 1.07 | | |
| PO 18 | I | 19 | 4.36 | .60 | -2.00 | .05 |
| | II | 19 | 4.68 | .48 | | |
| PO 19 | I | 19 | 3.84 | .96 | -1.68 | .10 |
| | II | 20 | 4.35 | .93 | | |
| PO 20 | I | 16 | 4.25 | .68 | .69 | .50 |
| | II | 17 | 4.05 | .90 | | |
| PO 21 | I | 18 | 4.38 | .50 | -1.83 | .08 |
| | II | 19 | 4.68 | .48 | | |
| PO 22 | I | 20 | 4.25 | .79 | -.23 | .82 |
| | II | 20 | 4.30 | .57 | | |
| PO 23 | I | 17 | 4.11 | 1.11 | -.50 | .62 |
| | II | 18 | 4.27 | .75 | | |
| PO 24 | I | 9 | 4.44 | .57 | .47 | .65 |
| | II | 15 | 4.33 | .62 | | |

*Level of significance accepted = $p < .05$.

# APPENDIX B

MEAN SCORES, t-VALUES, AND PROBABILITY OF INDIVIDUAL ITEMS OF THE PATIENTS' PREPAREDNESS FOR DISCHARGE ON A PRIMARY NURSING UNIT (GROUP I) AND A TEAM NURSING UNIT (GROUP II)

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| PD 1 | I | 17 | 4.41 | .71 | .51 | .61 |
| | II | 18 | 4.27 | .86 | | |
| PD 2 | I | 20 | 4.40 | .60 | .20 | .84 |
| | II | 17 | 4.35 | .79 | | |
| PD 3 | I | 19 | 4.31 | .95 | -.38 | .70 |
| | II | 17 | 4.41 | .51 | | |
| PD 4 | I | 11 | 4.27 | .91 | 1.44 | .18 |
| | II | 8 | 3.50 | 1.31 | | |
| PD 5 | I | 20 | 3.65 | 1.09 | -.09 | .93 |
| | II | 19 | 3.68 | 1.20 | | |
| PD 6 | I | 18 | 4.05 | 1.11 | .32 | .75 |
| | II | 15 | .393 | 1.10 | | |
| PD 7 | I | 18 | 4.16 | 1.15 | .14 | .89 |
| | II | 17 | 4.11 | .83 | | |
| PD 8 | I | 13 | 4.23 | .83 | -.78 | .44 |
| | II | 16 | 4.43 | .51 | | |
| PD 9 | I | 20 | 4.40 | .60 | 1.17 | .25 |
| | II | 20 | 4.15 | .75 | | |
| PD 10 | I | 19 | 4.05 | 1.18 | .65 | .52 |
| | II | 15 | 3.80 | 1.08 | | |
| PD 11 | I | 19 | 4.47 | .51 | 1.20 | .24 |
| | II | 16 | 4.18 | .83 | | |
| PD 12 | I | 19 | 4.36 | .76 | 1.00 | .32 |
| | II | 16 | .406 | 1.00 | | |
| PD 13 | I | 20 | 4.50 | .51 | 1.35 | .19 |
| | II | 18 | 4.16 | .92 | | |
| PD 14 | I | 17 | 4.00 | 1.12 | -.36 | .72 |
| | II | 15 | 4.13 | .99 | | |
| PD 15 | I | 20 | .440 | .75 | .91 | .37 |
| | II | 19 | 4.15 | .90 | | |
| PD 16 | I | 18 | 4.11 | 1.13 | .03 | .97 |
| | II | 20 | 4.10 | .91 | | |

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| PD 17 | I | 10 | 4.30 | .68 | -.27 | .79 |
| | II | 10 | 4.40 | .97 | | |
| PD 18 | I | 16 | 4.00 | 1.16 | -.32 | .75 |
| | II | 17 | 4.11 | .93 | | |
| PD 19 | I | 18 | 4.38 | .78 | 1.60 | .12 |
| | II | 18 | 3.83 | 1.25 | | |
| PD 20 | I | 19 | 4.42 | .51 | .13 | .90 |
| | II | 20 | 4.40 | .50 | | |
| PD 21 | I | 15 | 4.26 | .80 | .20 | .84 |
| | II | 19 | 4.21 | .79 | | |
| PD 22 | I | 13 | 4.23 | .83 | -.21 | .83 |
| | II | 17 | 4.29 | .77 | | |
| PD 23 | I | 14 | 4.35 | .50 | .27 | .79 |
| | II | 17 | 4.29 | .77 | | |
| PD 24 | I | 11 | 4.36 | .51 | .77 | .45 |
| | II | 15 | 4.13 | .99 | | |

# APPENDIX C

MEAN SCORES, t-VALUES, AND PROBABILITY OF INDIVIDUAL ITEMS COMPRISING THE JOB SATISFACTION SCALE FROM A PRIMARY NURSING UNIT (GROUP I) AND A TEAM NURSING UNIT (GROUP II)

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| JS 1 | I | 25 | 4.28 | .68 | .62 | .54 |
| | II | 25 | 4.16 | .69 | | |
| JS 2 | I | 25 | 4.64 | .57 | .69 | .49 |
| | II | 25 | 4.48 | 1.12 | | |
| JS 3 | I | 24 | 2.04 | 1.12 | .14 | .89 |
| | II | 23 | 2.00 | .95 | | |
| JS 4 | I | 24 | 1.62 | .77 | -1.15 | .26 |
| | II | 24 | 1.96 | 1.20 | | |
| JS 5 | I | 24 | 2.83 | 1.13 | 1.34 | .19 |
| | II | 24 | 2.42 | 1.02 | | |
| JS 6 | I | 24 | 3.83 | .92 | -.17 | .86 |
| | II | 24 | 3.88 | .74 | | |
| JS 7 | I | 25 | 4.40 | .71 | 1.88 | .07 |
| | II | 25 | 3.96 | .94 | | |
| JS 8 | I | 23 | 2.65 | 1.19 | 2.19 | .03* |
| | II | 25 | 2.00 | .82 | | |
| JS 9 | I | 23 | 1.57 | .99 | .35 | .73 |
| | II | 25 | 1.48 | .65 | | |
| JS 10 | I | 25 | 2.04 | .89 | 1.09 | .28 |
| | II | 25 | 1.76 | .93 | | |
| JS 11 | I | 23 | 2.52 | .23 | -2.29 | .03* |
| | II | 25 | 3.24 | .22 | | |
| JS 12 | I | 25 | 4.20 | 1.00 | 0 | 1.00 |
| | II | 25 | 4.20 | .96 | | |
| JS 13 | I | 23 | 3.65 | .71 | 1.33 | .19 |
| | II | 23 | 3.35 | .83 | | |
| JS 14 | I | 22 | 2.18 | 1.18 | -.62 | .54 |
| | II | 24 | 2.38 | .92 | | |
| JS 15 | I | 25 | 2.80 | 1.35 | .14 | .89 |
| | II | 24 | 2.75 | 1.19 | | |
| JS 16 | I | 23 | 1.60 | .89 | -.18 | .71 |
| | II | 24 | 1.70 | .91 | | |

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| JS 17 | I | 24 | 1.58 | .65 | .32 | .75 |
| | II | 25 | 1.52 | .71 | | |
| JS 18 | I | 23 | 3.74 | .92 | .53 | .60 |
| | II | 24 | 3.58 | 1.10 | | |
| JS 19 | I | 25 | 4.36 | .70 | .70 | .49 |
| | II | 25 | 4.20 | .91 | | |
| JS 20 | I | 24 | 2.88 | 1.19 | .98 | .33 |
| | II | 25 | 2.56 | 1.04 | | |
| JS 21 | I | 25 | 1.60 | .87 | .18 | .86 |
| | II | 25 | 1.56 | .71 | | |
| JS 22 | I | 24 | 1.92 | 1.06 | .29 | .78 |
| | II | 24 | 1.83 | .96 | | |
| JS 23 | I | 22 | 2.14 | .94 | -.93 | .36 |
| | II | 25 | 2.40 | 1.00 | | |
| JS 24 | I | 25 | 3.84 | .90 | 2.23 | .03* |
| | II | 25 | 3.20 | 1.12 | | |
| JS 25 | I | 23 | 2.82 | 1.40 | -.56 | .58 |
| | II | 25 | 3.04 | 1.21 | | |
| JS 26 | I | 24 | 2.67 | 1.27 | 0 | 1.00 |
| | II | 24 | 2.67 | 1.27 | | |
| JS 27 | I | 23 | 3.13 | .97 | .48 | .63 |
| | II | 24 | 3.00 | .89 | | |
| JS 28 | I | 24 | 4.04 | 1.08 | 1.70 | .10 |
| | II | 25 | 3.48 | 1.23 | | |
| JS 29 | I | 24 | 3.58 | 1.12 | .66 | .51 |
| | II | 24 | 2.50 | 1.22 | | |
| JS 30 | I | 24 | 2.67 | 1.20 | .48 | .64 |
| | II | 24 | 2.50 | 1.22 | | |
| JS 31 | I | 25 | 4.16 | .69 | 2.00 | .05 |
| | II | 25 | 3.76 | .72 | | |
| JS 32 | I | 25 | 3.52 | 1.16 | 2.50 | .02* |
| | II | 25 | 2.72 | 1.10 | | |

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| JS 33 | I | 24 | 4.21 | .83 | .20 | .84 |
| | II | 25 | 4.16 | .85 | | |
| JS 34 | I | 23 | 2.43 | 1.08 | -1.26 | .22 |
| | II | 24 | 2.83 | 1.09 | | |
| JS 35 | I | 23 | 3.00 | 1.21 | -.14 | .89 |
| | II | 24 | 3.04 | .86 | | |
| JS 36 | I | 22 | 2.18 | 1.05 | -.06 | .95 |
| | II | 25 | 2.20 | 1.04 | | |
| JS 37 | I | 25 | 4.04 | .89 | .99 | .33 |
| | II | 25 | 3.80 | .82 | | |
| JS 38 | I | 23 | 3.26 | 1.14 | 1.00 | .32 |
| | II | 25 | 2.96 | .94 | | |
| JS 39 | I | 23 | 2.87 | 1.10 | 1.99 | .05 |
| | II | 24 | 2.25 | 1.03 | | |
| JS 40 | I | 23 | 2.91 | 1.04 | -.33 | .74 |
| | II | 24 | 3.00 | .72 | | |
| JS 41 | I | 24 | 2.00 | 1.02 | .92 | .36 |
| | II | 23 | 1.74 | .92 | | |
| JS 42 | I | 24 | 2.25 | 1.11 | -.62 | .54 |
| | II | 25 | 2.44 | 1.04 | | |
| JS 43 | I | 24 | 4.17 | .64 | 3.23 | .002* |
| | II | 25 | 3.44 | .92 | | |
| JS 44 | I | 24 | 3.58 | 1.18 | -.12 | .90 |
| | II | 24 | 3.63 | 1.21 | | |
| JS 45 | I | 23 | 2.65 | .89 | -.20 | .85 |
| | II | 24 | 2.71 | 1.08 | | |
| JS 46 | I | 22 | 2.41 | 1.14 | .27 | .79 |
| | II | 24 | 2.33 | .70 | | |
| JS 47 | I | 23 | 3.17 | 1.19 | .76 | .45 |
| | II | 23 | 2.91 | 1.13 | | |

*Level of significance accepted = $p < .05$.

# APPENDIX D

## MEAN SCORES, t-VALUES, AND PROBABILITY OF INDIVIDUAL ITEMS COMPRISING THE JOB STRESS SCALE FROM A PRIMARY NURSING UNIT (GROUP I) AND A TEAM NURSING UNIT (GROUP II)

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| JST 1 | I | 25 | 2.08 | 1.32 | 1.42 | .16 |
| | II | 25 | 1.64 | .81 | | |
| JST 2 | I | 25 | 2.32 | 1.07 | 1.54 | .13 |
| | II | 21 | 1.86 | .95 | | |
| JST 3 | I | 24 | 2.33 | .96 | 1.60 | .12 |
| | II | 18 | 1.89 | .83 | | |
| JST 4 | I | 25 | 2.52 | .96 | 1.47 | .15 |
| | II | 24 | 2.17 | .70 | | |
| JST 5 | I | 23 | 2.61 | .66 | .45 | .66 |
| | II | 25 | 2.52 | .71 | | |
| JST 6 | I | 23 | 3.65 | .49 | -.63 | .53 |
| | II | 23 | 3.74 | .45 | | |
| JST 7 | I | 24 | 2.67 | .87 | 1.81 | .08 |
| | II | 24 | 2.21 | .88 | | |
| JST 8 | I | 24 | 3.21 | .83 | 1.24 | .22 |
| | II | 25 | 2.88 | 1.01 | | |
| JST 9 | I | 22 | 3.00 | .98 | 1.12 | .27 |
| | II | 20 | 2.65 | .33 | | |
| JST 10 | I | 23 | 2.84 | .82 | 2.65 | .01* |
| | II | 21 | 2.24 | .77 | | |
| JST 11 | I | 25 | 3.32 | .95 | 2.51 | .02* |
| | II | 25 | 2.68 | .85 | | |
| JST 12 | I | 25 | 3.32 | .69 | 1.13 | .26 |
| | II | 23 | 3.09 | .73 | | |
| JST 13 | I | 23 | 3.47 | .51 | .65 | .52 |
| | II | 20 | 3.35 | .75 | | |
| JST 14 | I | 24 | 2.42 | .78 | -.17 | .86 |
| | II | 24 | 2.46 | .88 | | |
| JST 15 | I | 24 | 2.96 | 1.12 | -.50 | .62 |
| | II | 25 | 3.12 | 1.13 | | |
| JST 16 | I | 25 | 2.28 | .79 | 1.04 | .30 |
| | II | 25 | 2.04 | .84 | | |

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| JST 17 | I | 25 | 3.40 | .87 | 1.31 | .20 |
| | II | 25 | 3.08 | .86 | | |
| JST 18 | I | 22 | 3.18 | .80 | -2.15 | .04* |
| | II | 23 | 3.61 | .50 | | |
| JST 19 | I | 23 | 2.70 | 1.11 | 1.86 | .02 |
| | II | 25 | 2.08 | 1.19 | | |
| JST 20 | I | 21 | 1.57 | .68 | 1.18 | .25 |
| | II | 23 | 1.35 | .57 | | |
| JST 21 | I | 20 | 3.35 | .75 | .62 | .54 |
| | II | 24 | 3.20 | .78 | | |
| JST 22 | I | 21 | 2.33 | .80 | .05 | .96 |
| | II | 25 | 2.32 | 1.07 | | |
| JST 23 | I | 25 | 3.16 | .90 | .53 | .60 |
| | II | 25 | 3.04 | .68 | | |
| JST 24 | I | 23 | 3.26 | .86 | .53 | .60 |
| | II | 22 | 3.14 | .71 | | |
| JST 25 | I | 25 | 3.36 | .76 | 1.10 | .28 |
| | II | 25 | 3.12 | .78 | | |
| JST 26 | I | 22 | 3.14 | .89 | .23 | .82 |
| | II | 25 | 3.08 | .81 | | |
| JST 27 | I | 24 | 1.88 | .74 | 3.10 | .003* |
| | II | 24 | 1.29 | .55 | | |
| JST 28 | I | 24 | 3.38 | .78 | 1.19 | .24 |
| | II | 25 | 3.12 | .73 | | |
| JST 29 | I | 24 | 3.08 | .97 | -.13 | .90 |
| | II | 25 | 3.12 | .97 | | |
| JST 30 | I | 22 | 3.27 | .70 | 1.13 | .27 |
| | II | 24 | 3.00 | .93 | | |
| JST 31 | I | 24 | 2.38 | 1.10 | .82 | .42 |
| | II | 25 | 2.12 | 1.09 | | |
| JST 32 | I | 23 | 2.22 | .90 | -.87 | .39 |
| | II | 25 | 2.44 | .87 | | |

| Variable | Group | No. of Cases | Mean | Standard Deviation | t-Value | 2-Tail Probability |
|---|---|---|---|---|---|---|
| JST 33 | I | 24 | 3.54 | .66 | .76 | .45 |
| | II | 25 | 3.40 | .65 | | |
| JST 34 | I | 24 | 3.13 | .95 | .30 | .76 |
| | II | 25 | 3.04 | 1.02 | | |
| JST 35 | I | 24 | 3.00 | .93 | -.14 | .89 |
| | II | 25 | 3.04 | 1.02 | | |
| JST 36 | I | 23 | 3.30 | .64 | .94 | .36 |
| | II | 24 | 3.12 | .68 | | |
| JST 37 | I | 21 | 2.62 | .74 | -.06 | .95 |
| | II | 22 | 2.64 | 1.00 | | |
| JST 38 | I | 21 | 2.52 | .60 | .27 | .79 |
| | II | 20 | 2.45 | 1.05 | | |
| JST 39 | I | 23 | 1.78 | .85 | -1.66 | .11 |
| | II | 24 | 2.25 | 1.07 | | |
| JST 40 | I | 24 | 2.42 | .97 | 1.24 | .22 |
| | II | 24 | 2.33 | .96 | | |
| JST 41 | I | 24 | 2.54 | .83 | .80 | .43 |
| | II | 24 | 2.33 | .96 | | |
| JST 42 | I | 24 | 2.42 | .97 | 2.22 | .03* |
| | II | 25 | 1.76 | 1.09 | | |
| JST 43 | I | 21 | 2.81 | .81 | 1.22 | .23 |
| | II | 20 | 2.45 | 1.05 | | |
| JST 44 | I | 25 | 3.92 | .28 | .59 | .56 |
| | II | 25 | 3.84 | .62 | | |
| JST 45 | I | 25 | 3.52 | .65 | .23 | .82 |
| | II | 25 | 3.48 | .59 | | |

*Level of significance accepted = $p < .05$.

# APPENDIX E

## HUMAN SUBJECTS COMMITTEE APPROVAL

THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85724
HUMAN SUBJECTS COMMITTEE
ARIZONA HEALTH SCIENCES CENTER 2305
TELEPHONE: 626-6721 OR 626-7575

April 27, 1979

Ms. Jeanette Doney Ullery
College of Nursing
Arizona Health Sciences Center

Dear Ms. Ullery:

We have reviewed your proposal entitled, "A Comparison of Primary and Team Assignment Methodologies," which was submitted to the Human Subjects Committee and concur with the College Review Committee's examination and recommendations of this minimal risk project. Therefore approval is granted effective April 27, 1979.

Approval is granted with the understanding that no changes will be made in the procedures followed or the questionnaires used (copies of which we have on file) without the knowledge and approval of the Human Subjects Committee and the College Review Committee. Any physical or psychological harm to any subject must also be reported to each committee.

Sincerely yours,

Milan Novak

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

MN:pd

xc: Ada Sue Hinshaw, Ph.D.
College of Nursing
Departmental Review Committee

## REFERENCES CITED

"ANA Peer Review Criteria." 1974. Mandated by U.S. Department of Health, Education and Welfare. Nursing Outlook, 22:545, September.

Atwood, Jan R., and Ada Sue Hinshaw. 1978. "Operative Trajectory Study: Relationships of Construct Validity to Predictive Modeling." Communicating Nursing Research, 11, May.

Aydelotte, M. K., and M. E. Tener. 1973. "An Investigation of the Relation between Nursing Activity and Patient Welfare." Iowa City, State University of Iowa.

Bilodeau, Carolyn Bascom. 1973. "The Nurse and Her Reactions to Critical-Care Nursing." Heart and Lung, 2:358-363, May-June.

Bloch, Doris. 1975. "Evaluating Nursing Care in Terms of Process and Outcome: Issues in Research and Quality Assurance." Nursing Research, 24:256-263, July-August.

Brief, Arthur P. 1976. "Turnover among Hospital Nurses: A Suggested Model." Journal of Nursing Administration, 6:55-57, October.

Bullock, R. 1953. "Position, Function, and Job Satisfaction in Nurses in the Social System of a Modern Hospital." Nursing Research, 2:4-14.

Bunning, Richard L. 1976. "Changing Employees' Attitudes." Supervisor Nurse, 7:54-60, May.

Ciske, Karen. 1974a. "Primary Nursing: An Organization that Promotes Professional Practice." Journal of Nursing Administration, 74:28-31, January-February.

Ciske, Karen. 1974b. "Primary Nursing: Evaluation." American Journal of Nursing, 74:1436-1438, August.

Claus, Karen E. 1978. Stress Management Project. NIH Special Training Demonstration Grant NU02072-02, San Francisco.

Cleland, Virginia S. 1965. "The Effect of Stress on Performance." Nursing Research, 14:292-298, Fall.

Colls, Jean. 1975. "Future Shock Invades Nursing." Journal of Nursing Administration, 5:27-28, March-April.

Cronbach, L. J. 1951. "Coefficient Alpha and the Internal Structure of Tests." Psychometrika, 16:297-334.

Daeffler, Reidum J. 1975. "Patients' Perceptions of Care under Team and Primary Nursing." Journal of Nursing Administration, 75:21-26, March-April.

Derryberry, M. 1939. "Nursing Accomplishments as Revealed by Case Records." Public Health Republic, 54:2035, November 17.

Donabedian, Avedis. 1966. "Evaluating the Quality of Medical Care." Milbank Memorial Fundamental Quarterly, 44:166-206, July.

Donabedian, Avedis. 1969. A Guide to Medical Care Administration, Vol. 2: Medical Care Appraisal. New York: American Public Health Association.

Dossett, Sylvia M. 1978. "Nursing Staff in High Dependency Areas." Nursing Times, 888-889, May 25.

Edwards, A. L. 1970. The Measurement of Personality Traits by Scales and Inventories. New York: Holt, Rinehart, and Winston.

Elpern, Ellen H. 1977. "Structural and Organizational Supports for Primary Nursing." Nursing Clinics of North America, 12:205-219, June.

Estok, Patricia Jenway. 1978. "Abortion Attitude of Nurses: A Cognitive Dissonance Perspective." Sigma Theta Tau: Image, 10:70-74, October.

Felton, Geraldene. 1975. "Increasing the Quality of Nursing Care by Introducing the Concept of Primary Nursing." Nursing Research, 24:27-32, January-February.

Harper, Mary W., Betty Marcom, and Victor Wall. 1972. "Abortion: Do Attitudes of Nursing Personnel Affect Patients' Perceptions of Care?" Nursing Research, 21:327-331, July-August.

Harrington, H., and C. Theis. 1968. "Institutional Factors Perceived by Baccalaureate Graduates as Influencing Their Performance as Staff Nurses." Nursing Research, 17:228-235, May-June.

Hasslemeyer, E. G. 1962. "Problems in the Development of Adequate Criteria." Nursing Research, 11:208-211, Fall.

Hegyvary, Sue Thomas. 1977. "Foundations of Primary Nursing." Nursing Clinics of North America, 12:187-196, June.

Herzberg, Frederick, B. Mausner, and Barbara B. Snyderman. 1967. The Motivation to Work, 2nd edition. New York: John Wiley and Sons.

Hinshaw, Ada Sue, and Jan R. Atwood. 1979. "Patient Preparedness for Discharge." Unpublished report, Arizona Health Sciences Center, University of Arizona, Tucson.

Hofling, Charles K., Madeleine M. Leininger, and Elizabeth Bregg. 1972. Basic Psychiatric Concepts in Nursing. Philadelphia: J. B. Lippincott.

Huckabay, Loucine M. D., and Betty Jagla. 1979. "Nurses' Stress Factors in the Intensive Care Unit." Journal of Nursing Administration, 9:21-26, February.

James, George. 1961. Planning and Evaluating Health Programs. Chicago: E. A. Confrey.

Johnson, Barbara A., Jean E. Johnson, and Rhetaugh G. Dumas. 1970. "Research in Nursing Practice: The Problem of Uncontrolled Situational Variables." Nursing Research, 19:337-342, July-August.

Johnson, Miriam, and Harry Martin. 1975. "A Sociological Analysis of the Nurse's Role." American Journal of Nursing, 58:373-377, March.

Jones, Edna Mae. 1962. "Who Supports the Nurse?" Nursing Outlook, 10:476-478, July.

Katz, Daniel. 1964. "Motivational Basis of Organizational Behavior." Behavioral Science, 9:131-146, April.

King, S. H. 1962. Perceptions of Illness and Medical Practice. New York: Russell Sage Foundation.

Kramer, Marlene. 1969. "The New Graduate Speaks -- Again." American Journal of Nursing, 69:1903-1907, September.

Kramer, Marlene. 1974. Reality Shock. St. Louis: C. V. Mosby Co.

Kron, Thomas. 1971. "Team Nursing -- How Viable Is It Today?" Nursing Research, 1:19-24, November-December.

Lambertson, E. C. 1965. Nursing Team Organization and Functioning. New York: Bureau of Publications, Teachers College, Columbia University.

Majesky, Sophie J., Karen T. Nishio, and Mary H. Brester. 1978. "Patient Indicators of Nursing Care." Nursing Research, 27:365-371, November-December.

Manthey, Marie, Karen Ciske, Patricia Robertson, and Isabel Harris. 1970. "Primary Nursing." Nursing Forum, 9:64-83.

Marran, Gwen. 1975. "Patients' Evaluations of Their Care: Importance to the Nurse." Nursing Outlook, 21:322-324, May.

Maslow, Abraham. 1954. Motivation and Personality. New York: Harper and Brothers.

Maslow, Abraham. 1970. Motivation and Personality, 2nd edition. New York: Harper and Row.

McCloskey, Joanne. 1974. "Influence of Rewards and Incentives on Staff Nurse Turnover Rate." Nursing Research, 23:239-247, May-June.

Menzies, Isabel E. P. 1960. "Case Study on the Functioning of Social Systems as a Defense Against Society." Human Relations 13:95-121, May.

Michaels, Davida R. 1971. "Too Much in Need of Support to Give Any?" American Journal of Nursing, 71:1932-1935, October.

Nahm, H. 1940. "Job Satisfaction in Nursing." American Journal of Nursing, 12:1389-1392.

Nehring, Virginia, and Barbara Geach. 1973. "Patients' Evaluation of Their Care: Why They Don't Complain." Nursing Outlook, 21:317-321, May.

Palmer, Irene S. 1965. "The Development of a Measuring Device." Nursing Research, 14:100-105, Spring.

Risser, Nancy L. 1975. "Development of an Instrument to Measure Patient Satisfaction with Nurses and Nursing Care in the Primary Care Setting." Nursing Research, 24:45-51, January-February.

Seybolt, John W., Cynthia Pavett, and Duane D. Walker. 1978. "Turnover among Nurses: It Can Be Managed." Journal of Nursing Administration, 78:4-9, September.

Shaw, M. E., and J. M. Wright. 1967. Scales for the Measurement of Attitudes. New York: McGraw-Hill Book Co.

Sheridan, John E., and Donald J. Vredenburgh. 1978. "Usefulness of Leadership Behavior and Social Power Variables in Predicting Job Tension, Performance, and Turnover in Nursing Employees." Journal of Applied Psychology, 63:89-95, January.

Simon, R., and M. Olson. 1960. "Assessing Job Attitudes of Nursing Service Personnel." Nursing Outlook, 8:424-427.

Slavitt, Dinah B., Paula L. Stamps, Eugene B. Piedmont, and Ann Marie B. Haase. 1978. "Nurses' Satisfaction with Their Work Situation." Nursing Research, 27:144-120, March-April.

Stufflebeam, D. F. (ed.). 1971. Education Evaluation and Decision Making. Illinois: F. E. Peacock.

Tetreault, Alice. 1976. "Selected Factors Associated with Professional Attitude of Baccalaureate Nursing Students." Nursing Research, 25:49-53, January-February.

Ullrich, Robert A. 1978. "Herzberg Revisited: Factors in Job Dissatisfaction." Journal of Nursing Administration, 78:19-24.

U.S. Department of Health, Education and Welfare. 1974. Professional Standards Review Organization. P.L. 92-603, Chapter VII, Section 730.

Vroom, V. H. 1964. Work and Motivation. New York: John Wiley and Sons.

Zimmer, J. 1974. "A Model for Evaluating Nursing Care." Hospitals, 48:91-131, March 1.

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