A COMPARATIVE STUDY OF PRIMARY AND CASE METHODS OF NURSING CARE DELIVERY IN TERMS OF PATIENT SATISFACTION AND STAFF SATISFACTION AT A SELECTED HOSPITAL

by

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CHAPTER I

PROBLEM AND RATIONALE FOR THE STUDY

Introduction

Nursing has been identified in the past by various adjectives that indicate the kind of nursing one values or is trying to introduce. Terms such as functional nursing, team nursing, case nursing, and primary nursing are used to describe a particular nursing modality.

The provision of a high quality of patient care is the fundamental objective of nursing activity. Two other major areas of concern that are closely related to improved quality of care are the outcomes of patient satisfaction and nurse satisfaction. In the process of improving the quality of care given and at the same time increasing patient and nurse satisfaction, nurses question whether one method of nursing care delivery is better than another.

Because many nurses believe that depersonalized and fragmented care has resulted from team and functional nursing, professional nurses are now trying to implement a system that will directly involve the registered nurse in patient care. Primary and case nursing are similar systems of care in that they offer solutions to some of the problems identified in team and functional nursing. Both systems involve the registered nurse in direct patient care, allowing the utilization of knowledge, skill and judgment gained through educational programs. The routine daily tasks performed in patient care (bathing, bedmaking, ambulating, passing meal trays, etc.) may not require much skill, but when considered in the context of the patient's total condition, they provide opportunities to observe

and interact with the patient that can be used by the skilled nurse to meet patient needs thus improving the quality of care while increasing both patient and nurse satisfaction.

Little evidence exists to support the assumption that primary nursing is a better system of care than case nursing. Therefore, the purpose of this study is to compare the two care delivery systems of primary nursing and case nursing and their effects on patient and professional nurse satisfaction.

The literature review will begin with a description of the four nursing modalities including differences in the organization of care and specific characteristics or features of primary and case nursing. Various problems that have been identified with primary and case nursing will be explained. The claimed outcomes of increased quality of care, staff satisfaction and patient satisfaction will be reviewed. The chapter concludes with a summary of the literature leading to the rationale for the premise that primary nursing contributes to increased patient and nurse satisfaction.

Nursing Modalities

As previously stated, there are four basic patterns of nursing care delivery used in hospitals today: Case, primary, functional, and team. In the case method, total care of the patient is assigned to one staff member. Primary nursing is basically an outgrowth of this method. In contrast, functional nursing is task oriented in that one staff member is assigned a specific task or group of tasks such as bed bath, bedmaking, vital signs and giving medications for all patients. Team nursing is a method of delegating direct patient care to several team members. The

underlying principle in both team nursing and functional nursing follows the industrial pattern which states that a division of labor yields maximal efficiency.

The case method is the oldest method of care, dating back to the emergence of nursing as a profession. It began during the time when nurses provided 24-hour a day care for the patient and family (Logsdon, 1973). Marran and associates (1976) described the case method as a method which enables the nurse to plan and administer care to the patient on a one-to-one basis. The case method, with some modifications, has persisted to the present day in some settings: Today, case nursing frequently is defined as total patient care on an eight-hour basis by a professional nurse. At the present time the major utilization of case nursing is seen in student nurse assignments, acute care settings and private duty nursing (Marram, Flynn, Abaravich, & Carey, 1976; Barrett, 1968). Since case nursing enables the professional to provide direct patient care, it leads to satisfaction of the nurse and good patient care (Geitgey, 1971).

The case method remained the most prevalent method of nursing care delivery until World War II. At this time, functional and team nursing began to emerge as nurses believed that the case method was less appropriate for meeting the shortage demands placed on nursing (Byers, 1971). Shanks (1970) attributed the decreasing use of the case method to the increase in utilization of practical nurses and nurses' aides who were not prepared to assume complete care.

In both team and functional nursing, more than one staff member provides care to each patient during an eight-hour shift as well as throughout the 24-hour day. Also, there may be no consistency in which

staff are assigned to perform specific aspects of a patient's care during the course of hospitalization. The individuals most likely to be giving direct patient care in both of these methods is the nursing assistant or the licensed practical nurse.

Primary nursing, as a new approach to patient care delivery, began in 1968. Like the case method, primary nursing provides total patient care, but it extends the responsibility and accountability of the nurse for a 24-hour period (Manthey, 1970).

The features of primary nursing include:

1. Assignment of patients to a specific primary nurse who usually assumes responsibility for their care each day the nurse is on duty from admission until discharge or transfer from that unit.
2. Authority and autonomy to provide comprehensive assessment, planning, and implementation of total patient care in a 24-hour period through written directions via the nursing care plan.
3. Accountability of associate nurses, those who care for the patient when the primary nurse is off duty, for implementation of the care plan.
4. Continuous nurse-patient-physician communication to facilitate individual patient goal attainment including family and appropriate referrals for a coordinated medical-nursing plan of care.
5. Communication between the other care givers, including nursing staff and other hospital services, to coordinate and improve implementation of patient care (Ciske, 1974; McCarthy, 1978).

Descriptions and definitions of the primary nurse concept have remained consistent throughout the literature (Manthey, 1970; Logsdon, 1973;

Christman, 1976). Manthey and Ciske (1970) describe the primary nurse as responsible for the total care of a small group of patients from admission until discharge or transfer to another unit. The role includes: 1) providing daily care for the patient, 2) assessment of patient need, 3) preparation and maintenance of the patient's care plan, 4) coordination of routine care and treatment as well as diagnostic tests and treatments prescribed by the physician, 5) communication of relevant information to other nurses and members of the health team, and 6) preparatory planning with the patient for discharge. Other nurses, called associate nurses, care for the patient and follow the plan of the primary nurse when she is not present.

Marram and her colleagues have described primary nursing as "the delivery of comprehensive, continuous, coordinated and individualized care through the primary nurse who has autonomy, accountability, and authority to act as the chief nurse for her patients" (1976, p.2). She further explains these dimensions or characteristics of a primary nurse, indicating that the primary nurse has authority in that she is responsible for the continuity and quality of total patient care, whether or not she is on duty. Because there is no hierarchy of nursing decision makers, primary nurses make decisions for their own patients and are accountable for those decisions. Finally, Marram states that the primary nurse has autonomy with other health personnel, including the physician, in that participation is collaborative, not subordinative, and collegial relationships are maintained.

Ciske (1974) emphasizes another important element of primary nursing, that of communication between care givers, not only in daily nursing reports but also between disciplines. In addition, the

responsibility of the primary nurse in directing and evaluating the care of other nurses has been emphasized (Spoth, 1977). Because nurses are then held responsible and accountable for the care they give, peer review is an essential component of primary nursing.

The literature describes several philosophical bases for primary nursing. Christman says that "primary nursing, as it is beginning to evolve, is a useful mechanism for nurses to play the full professional role of service, education, consultation and research" (1976, p.83). He feels it is a significant care delivery system because performance is measureable and the outcomes of the performance can be evaluated, and accountability fixed. The nursing process becomes highly visible, he says, and thus what constitutes the practice of nursing is clarified for other health professionals. He sees it as a means for bringing nurses and physicians together as it places them in a highly interdependent arrangement, and provides a base for clinical communication.

According to Ciske (1974 b), primary nursing is an opportunity for professional nurses to implement the skills and practices of their educational programs. Primary nursing, she says, raises expectations, and therefore raises the level of practice. She feels that it may contribute to the prevention of role deprivation of new graduate nurses which frequently results in disillusionment, bitterness, a change in values, and unsatisfactory patient care. Marram and associates (1976) believe that primary nursing is an attempt to be patient-focused rather than task-centered.

The differences in philosophy of the four systems are described by Ganong and Ganong (1976). They state that functional and team nursing generally see the patients as representing a daily workload to be

accomplished. These two systems ask the key question, "Are your patients done yet?" The focus is upon the tasks, procedures and routines which must be carried out and which can be translated into the essential number of different kinds of nursing personnel who can be scheduled to get the work done on time in each specific health care setting.

On the other hand, case and primary nursing view the patients as people with problems and needs who require individualized help in the specific health care setting. Here the key question is, "Are the patients' needs being met?" The focus is upon the use of the nursing process steps of assessing, planning, implementing and evaluating. "Specific tasks and procedures are still necessary to help each patient meet his individualized needs, but routines are used only as they are appropriate for resolving identified problems of an individual patient" (Ganong & Ganong, 1976, p.32). This is in contrast to the routines of functional and team nursing which are set up to carry out tasks and procedures for patients en masse.

Studies have been conducted that confirm or demonstrate that different philosophies are evident in the nurses' activities when different modalities are used. This difference in philosophy was described by Marram and associates (1976) in a study comparing primary and team nursing. Analysis of the staff questionnaire showed that team staff more often rated unit management and carrying out doctor's orders as extremely important, and generally spent more time on unit management and providing physical comfort. The primary staff showed a tendency to rate providing emotional support and teaching, and observing and assessing the patient and family as extremely important.

The primary staff saw themselves spending more time than the team staff on determining the family's emotional needs, finding out the patients' personal habits and preferences in order to plan care, discussing modification in activities of daily living to prevent recurrences of illness, and arranging for discharge of the patient. There were no professional tasks which the team unit nurses viewed as entailing more time than did nurses on the primary unit. The tasks primary nurses saw themselves more often were completing discussing with the doctor needs for other services, discussing discharge plans with the doctor, and arranging for discharge of the patient. The team staff saw themselves as more often evaluating the care given by other personnel on the same shift and evaluating care by other nursing staff on other shifts.

At Evanston Hospital (Illinois), a work sampling study is described showing that the team care delivery system being used was not effectively meeting either the needs of patients or staff (Corpuz, 1977). The study showed that the team leader spent much of her time in technical functions with little time left for clinical nursing, that RN's were consistently overextended, and that nursing assistants had as much as 60% available time after completing their assigned tasks. These problems were resolved by the implementation of primary nursing.

In another study, conducted by Marram, the relationship between the mode of nursing care delivery and nursing care planning was examined. Data were collected to measure the individualization of care in nursing records. The analysis of the study data "revealed significant differences in the assessments and care plans. There was much evidence that the primary staff notations reflected systematic, individualized

care planning more often than the team staff" (1976, p.21). In the area of psychological and anticipatory guidance, however, the team nurses more often recorded needs in the care plan.

Problems have also been identified with primary nursing. Logsdon (1973) has indicated the possibility of communication breakdown should the primary nurse fail to communicate her plan. Some nurses have difficulty accepting another nurse as the authority for planning care of patients, or may change the care plan without first consulting the primary nurse. Other nurses, says Logsdon, fear becoming too deeply involved with patients and their families. Nurses, themselves, have found it difficult to allow time for care planning. Logsdon further says that night nurses do not feel they have the opportunity to talk with patients and therefore feel inadequate at planning care on a 24-hour basis.

Pisani (1977) reported problems associated with the implementation of primary nursing. She indicates these problems may be transitory in that they seem to be related to the frustrations associated with the change process. The change to primary nursing involves several concepts which require some degree of internal changes in previously held values and beliefs. These changes manifest themselves through complaints related to communication breakdown, routine tasks not getting done, staff feelings of isolation from one another, a breakdown of the cooperative spirit experienced in team nursing, and unhappy feelings over the greater distinctions between professional and auxiliary staff. Feelings are identified as fear and anxiety related to the change in level of accountability and responsibility involved in the primary nursing role, loss of status and power by those who have previously been team leaders and role confusion.

Ciske (1977) graphically demonstrates how the values of the team system actually reinforce the concepts of group cohesion in the following example:

	Team Nursing	Primary Nursing
1.	Belonging, participation shared decisions	Autonomy, independent decisions
2.	Shared risk, shelter in anonymity	Individual risk, visibility of decisions
3.	Intermittent involvement, protection from frustration, hurt and feelings of inadequacy	Continuous patient-nurse relationship, deeper involvement, vulnerability (1977, p.3).

When the team system, which has emphasized the basic need for group security, is changed or removed, according to Ciske, the nursing department must provide support as well as education and practical help. She recommends a change agent to act as a facilitator, giving direction and guidance while allowing group members to make their own decisions. Ciske sees this process as promoting individual feelings of self-confidence and power on a step-by-step basis.

Most of the literature suggests that primary nursing is the desired system because it meets both patients' and nurses' needs by individualizing patient care and by promoting professionalism through increased nurse responsibility and accountability. However, there are some problems that have been identified with the primary system that may be inherent in the system because of the isolation of practitioners from the group cohesion of the team system. Although the literature indicates these problems may be transitory in that they are related to the change process, it is feasible that they may be ongoing, requiring changes in the administrative structure to offer continued reassurance and guidance to the individual practitioner.

Claimed Outcomes

The rationale for the claimed outcomes underlying most of the literature, though not implicitly stated, is encapsulated in the following: Primary nursing differs from other nursing systems in that professional accountability and responsibility of the nurse for the specific caseload of patients is recognized (Marram, 1976; McCarthy & Schifalacqua, 1978). Because this responsibility and accountability are both consistent and continuous (on a 24-hour basis from admission until discharge or transfer from the unit), a one-to-one nurse/patient relationship develops (Osinski & Morrison, 1978; Daeffler, 1975; Jones, 1975). This relationship establishes a communication pattern which promotes a mutual agreement between patient and nurse regarding patient needs and a plan of nursing intervention (Marram, 1976; Ciske, 1974; White, 1972).

At the same time, the increased professional role conception (beliefs and values about the nursing role) affords nurses the opportunity to implement what they have been taught in their educational programs regarding quality of care for their patients (Ciske, 1974 b; Malone, 1972). Because nursing care is individualized and consistent, nurses are also able to evaluate more readily specific nursing interventions. This evaluation acts as a reward to professional growth (Ciske, 1974).

Through achievement of a more professional nurse role and the provision of care, which is based upon a mutual nurse-patient interaction, three main outcomes become apparent: 1) professional nurse satisfaction increases; 2) quality of patient care improves; and 3) patient satisfaction with care increases (Risser, 1975; White, 1972; Marram, 1976; Ciske, 1974 a; Jones, 1975; Daeffler, 1975). A review of studies which support these outcomes will follow.

a. Staff Satisfaction

Sources of increased staff satisfaction attributed to primary nursing are the opportunity to provide creative and individualized care, the learning stimulated by the challenge of providing total care for particular patients, the decrease in disparity between what is learned in school and what is practiced in the hospital, the decrease in supervision and resulting increase in autonomy, the assignment of patients according to analysis and development of strengths of staff members to support staff, and to act as a consultant to other primary nurses (Donahue, Weiner & Shirk, 1977).

Kramer (1974) indicates that professionalism contributes to the total feeling of satisfaction in a staff nurse position in that the activities of job performance affect satisfaction. Ciske (1976) developed a questionnaire to study the relationship of job satisfaction and professionalism in primary and team nursing systems. Results supported Kramer's premise: A strong positive correlation was found between accomplishment of professional activities and job satisfaction. Ciske indicated that because professionalism is so closely linked to job satisfaction, it may be possible to use a questionnaire on opportunities for professional practice as a measure of job satisfaction.

Marram (1973) has described the results of informal and formal data made over a period of one year on a unit practicing primary nursing with a staff of all new graduate nurses. Commitment to professional ideals by young graduates on the experimental unit, when compared with young graduates on a control unit, stayed high and even increased, while graduates on the control unit lost certain professional ideals. The nurses on the experimental unit rated considerably higher in job satisfaction,

but no difference was observed in patient satisfaction according to the formal questionnaire, Informal descriptions, however, tended to identify that nurses on the experimental unit more often demonstrated a genuine concern for individual patients.

Dent (1977) reports a study conducted under the auspices of the Western Interstate Commission for Higher Education. A group of eleven researchers in six Western region hospitals in a four-state area compared primary nursing with team and case systems in terms of job satisfaction. Staff satisfaction was defined as the attitudes and feelings employees have toward work. The primary nurse, according to Kent, expresses significantly greater job satisfaction than the team nurse. Also, in the hospital that used case nursing, the mean staff satisfaction score was higher for primary nursing than for case nursing.

b. Quality of Care

The focus of most studies evaluating quality of care is on nurse performance rather than on empirical evidence for patient outcomes. In fact, only one study was found that utilized patient outcomes as an evaluation of quality of care.

Jones (1975) described a study utilizing patient outcomes to evaluate the effect of primary nursing on the post-operative adaptation of renal transplant patients at the University of Michigan Medical Center. Results showed reduced length of hospital stay for the primary nursing unit, averaging a full three weeks less than the team unit. The study also revealed fewer complications during the recovery period as well as fewer negative patient behaviors after surgery in the primary nursing unit.

A demonstration project was conducted on a clinical care unit at Children's Hospital National Medical Center in the District of Columbia (Felton, 1975). Nurses on the demonstration unit learned primary nursing. Quality of care on this unit was compared with a control unit as measured by the Slater Nursing Competencies Scale, the Quality Patient Care Scale, and the Phaneuf Nursing Audit. The ratio of RN's and of baccalaureate prepared RN's was higher on the experimental unit. Also, the control unit, due to a difference of patient days, gave more hours of care per patient day. Mean scores derived from all tools were found to be higher for the experimental unit than for the control unit.

In another study, continuity of care was evaluated on a conventional team nursing unit and a primary nursing unit (Corpuz, 1977). Nursing care for primary patients received a higher score than nursing care for team patients in the four areas of nursing assessment, plan of nursing care and intervention, communication and coordination, and discharge planning. "The overall results showed greater continuity of care among patients in the primary nursing care system than those patients in the modular and team nursing system" (1977, p. 95).

A second study conducted by Corpuz involved a study of four units by Medicus Systems Corporation. Units studied included one non-primary nursing unit, two units where primary nursing was operational, and a fourth unit with primary nursing and a clinical specialist as head nurse. "Data indicated exceptionally high ratings on the primary care unit with a clinical specialist, good scores on the two primary care units, and less than acceptable scores on the care unit where primary nursing had not been initiated" (1977, p. 95).

Similarly, Kent (1977) compared the primary nursing care delivery system in the hospital with team and case systems in terms of quality of patient care. Results of the quality of nursing process demonstrated a significantly higher quality of care in the primary nursing system than in the team nursing modality. No significant difference emerged between the care modalities of case and primary nursing; however, case nursing demonstrated a higher mean of quality scores. The number of hospital beds per unit revealed a significant negative correlation with quality of care. Kent indicated that this factor could have influenced the quality of care measure on primary units since they were generally smaller in number of beds while team units generally had the greatest number of beds.

In view of the reported studies, there is little evidence to assume that quality of care, in terms of benefits to patients, differs according to the mode of care delivery.

c. Patient Satisfaction

Studies which identify factors that patients find satisfying as well as studies measuring patient satisfaction will be reviewed. Asking patients to evaluate medical and nursing services is not new. In an older but classic study, Abdellah and Levine (1957) developed an instrument to measure satisfaction of patients with the nursing care received. In the process of developing the tool, patients were asked to sort the satisfactory or unsatisfactory occurrences identified during hospitalization as a means of weighting the events for scoring purposes. The three events selected by patients as being of the most importance to the quality of care were:

"Couldn't get anything from the nurse for pain."

"No answer to call for nurse for a long time."

"Had to wait a long time to use the bathroom." (1957, p. 107). An outcome of this study showed that patient satisfaction with nursing care increased in direct proportion to the number of registered nursing hours of care provided.

Ewell (1967) conducted a study of hospitalized patients to discover what patients really thought about their nursing care. Outcomes of his study revealed that patients wanted greater personal care by all workers. Of the patients studied, none mentioned noise, food, or other hospital annoyances, but rather the area of nursing mentioned as needing the most emphasis was personal, nonmedical bedside care and attention.

In a study conducted by Caplan (1966), patients were asked to rank important variables which led to satisfaction with outpatient services. The major important variables were: 1) the belief that they were receiving quality medical care; 2) positive staff-patient relationships; and 3) positive feelings about clinic procedures. According to the author, an interesting finding of this study was that the nurse's role permeated the entire range of the patient's experience with the clinic. Contact with the nurse contributed both directly and indirectly to the patient's general satisfaction with the medical treatment and procedures. The study was not designed to identify the nursing behaviors which influenced the patient's positive attitude.

White (1972) went a step further by identifying and listing nursing activities according to the following categories: 1) physical care, 2) psychosocial care, 3) observing, reporting, and implementing medical care, and 4) preparing for discharge. The purpose of the study

was to determine "to what extent and in what areas do nurses' views of selected nursing activities agree with those of the patient about whose care she is responding" (1972, p. 5). Results of the study indicated a greater concern by patients than nurses regarding the importance of personal hygiene and physical comfort measures as well as environmental factors such as noise. The findings imply that patient satisfaction with nursing care would increase if nurses gave higher priority to physical comfort and environmental factors and assessed more carefully each patient's need for assistance with routine care. According to the author, following this suggestion would promote mutual understanding of expectations, capabilities, and therapeutic needs leading to more realistic care planning.

In the study conducted by Marram (1976) questionnaires were constructed to investigate patients' satisfaction with their nursing care and the degree to which they believed it was individualized and personalized. The data showed that "while both units perform some important interventions to personalize care, the primary staff are perceived to perform a greater variety of individualizing activities more frequently" (1976, p. 58). Significant differences in care as viewed by the primary patients dealt with consideration of family in the planning of care, a personalized approach to discussion of the patient's illness, and greater coordination of patient information with other staff. Patient perception on other items, however, was not significantly different for the two care modalities.

A study to measure patient perceptions of care as indications of satisfaction were described by Corpuz (1977). After the introduction of

primary nursing, the patients more often perceived a "particular nurse" as theirs and were better able to verbalize what they learned from patient education than before the introduction of primary nursing.

In a previous study comparing patient satisfaction with primary and team nursing systems reported by Ciske (1974 a), the intent was to discover which system accomplished the most objectives of nursing care. One finding indicated that patients from primary units reported nurses provided opportunities for them to talk about complaints or problems more often than patients from team nursing units.

Daeffler (1975) conducted a study to answer the question, "Is there a difference in identified omissions in care as perceived by patients on medical/surgical units under two different patterns of care; team nursing and primary care?" (1975, p. 20). The conceptual framework was built on the premise that the nursing activities should reduce stress factors caused by entrance into the health care system. Expressive activities, defined as explaining, reassuring, understanding, accepting and supporting behaviors, are associated with lowering tension levels. Instrumental activities, such as examining, diagnosing, and treating, are reported to provoke higher emotional tension, embarrassment, anxiety and pain. The hypothesis was that lower tension levels lead to greater patient satisfaction with the outcome being fewer complaints of nursing care as measured by reports of patient's perceptions of omissions in care. In all six categories, the scores indicated that omissions in care were higher in the team nursing group. Scores representing satisfaction with care all showed higher percentages on the primary nursing group.

Patients are able to identify various factors, events, or variables that lead to greater satisfaction with nursing care (Abdellah & Levine, 1957; Ewell, 1967; Caplan, 1966; White, 1972). A consistent finding in the studies on patient satisfaction points to the importance of the professional nurse's role in patient care services. Patients indicate a greater satisfaction with nursing care as well as a perception of improved quality of care when there is an increased number of professional nurses present (Abdellah & Levine, 1957; Caplan, 1966) and when nurses provide more direct physical care (Ewell, 1967; White, 1972). The literature indicates that systems of nursing which modify the role of the nurse, so that patients receive direct care from a professional nurse, result in increased patient satisfaction and improved perception of care (Marram, 1976; Corpuz, 1977; Ciske, 1974; Deaffler, 1975; Kent, 1977). Primary and case systems both modify the role of the nurse in this way; therefore, the outcomes of increased patient satisfaction and improved perception of care would be expected.

The Problem

Researchers claim that primary nursing is the most appropriate approach for meeting the needs and expectations of consumers and nursing staff (Corpuz, 1977; Christman, 1976; Marram, 1976). However, most of the studies reported in the literature are based on a comparison of primary and team nursing systems (Marram, 1976; Corpuz, 1977; Manthey, 1970; Ciske, 1974; Felton, 1975; Daeffler, 1975). Differences in outcomes in these studies may be due to differences in organization of care delivery or may merely reflect the response to change from one method to another such as the group mode (team nursing) to the individual mode

(primary nursing). The increased attention staff receive and their involvement in planning the change may account for their increased satisfaction and the improved quality of care.

There is even less evidence to claim that primary nursing is superior to case nursing. Both are similar in that they provide total care by a professional nurse to the patient. Both systems have reported increased nurse and patient satisfaction as well as improved quality of care when compared to the fragmented care modalities of team and functional nursing (Kent, 1977). However, primary nursing and case nursing differ in that primary nursing requires: 1) the primary nurse to have the authority and autonomy to plan and implement patient care; 2) the primary nurse to hold her colleagues accountable for implementing the care plan in her absence; and 3) each patient to be assigned to a specific primary nurse from admission until discharge or transfer from the unit (McCarthy & Schifalacqua, 1978).

Only one study was found comparing primary and case methods of nursing care delivery (Kent, 1977). In this study Kent cautions that more in-house comparisons of care modalities as well as more across-hospital studies need to be made before conclusions may be reached regarding the primary nursing system of patient care.

According to the review of the literature, primary nursing should lead to increased patient satisfaction because patients have identified specific features or characteristics of primary nursing as leading to greater satisfaction. These features include: Increased personal bedside care by a professional nurse (Abdellah & Levine, 1957; Ewell, 1967; Caplan, 1966; White, 1972); consistent and positive staff-patient

relationship (including the family) (Caplan, 1966; Irwin, 1973); and an honest and concerned interest (Irwin, 1973).

When patients perceive their needs are being met they are more satisfied with nursing care. According to White (1972), it is possible to meet patient's needs by giving higher priority to both physical comfort and environmental factors as well as assessing more accurately patient need for assistance with routine care. Theoretically, the primary nursing system provides a better opportunity for mutual understanding of nurse and patient expectations, capabilities, and therapeutic needs to be realized through individualized care planning (Osinski & Morrison, 1978; Daeffler, 1975; Jones, 1975). Since nurse performance is the most frequent measure of quality of care the individualized care planning based on mutual agreement between nurse and patient leads to improved quality of nursing care (Marram, 1976; Ciske, 1974; White, 1972). When nurses are given an increased professional role through accountability, responsibility and authority, which primary nursing allows, nurses are also more satisfied with the provision of nursing care (Christman, 1976; Spoth, 1977; Marram, 1976 b).

The proposed study will evaluate nursing care in an acute care setting from both the nurses' and the patients' perspectives. The purpose of the research is to answer the question: Is patient and nurse satisfaction with nursing care greater in nursing units where primary nursing is practiced than in units where case nursing is practiced?

Although the relationship of nurse satisfaction to patient satisfaction was not dealt with explicitly in the research literature, the theoretical rationale justifying the claimed outcomes for primary

nursing is based on an assumption about this relationship. Therefore, this study will seek to answer the question: Is there a correlation between patient and nurse satisfaction?

CHAPTER II

METHOD

Overview

This study was designed to compare the satisfaction of nurses and patients with care given on four acute care units, two using primary nursing and two using case nursing. Patient satisfaction was measured by the Questionnaire Regarding Care Given by Nurses developed by Ciske (1974a). Staff nurse satisfaction was measured by the Staff Nurse Questionnaire: Accomplishment of Professional Activities, also developed by Ciske (1976).

Hypotheses

Proponents of primary nursing claim that because the system emphasizes accountability, responsibility, and professionalism of the nurse, both nursing satisfaction and patient satisfaction are greater on units using the system. Based on this premise, the study tested the following hypotheses:

1. Patients on hospital units utilizing the care delivery system of primary nursing will express greater satisfaction with nursing care than patients on units utilizing the care delivery modality of case nursing.
2. Professional nursing staff on hospital units utilizing the care delivery system of primary nursing will express greater job satisfaction than nursing staff on units utilizing the care delivery modality of case nursing.

3. Patients on hospital units where nursing staff satisfaction is high will express greater satisfaction with nursing care than patients on units where nursing job satisfaction is low.

Setting Selection

The study was conducted in a 265-bed, non-profit facility located in a residential, metropolitan area. The hospital is relatively new in structure, completed in 1977. The major factors contributing to hospital selection were willingness of the nursing administration to cooperate with the research study as well as the fact that both primary and case methods are utilized in the hospital.

All of the hospital units consist of 16 private patient rooms. The staff-patient ratio is consistent throughout the units, determined by the level of patient care required as outlined by the Joint Commission on Accreditation of Hospitals (JCAH). The units selected were considered to be more stable at the time of the study than the other hospital units. This judgment was based on the length of time the systems of nursing had been functioning on the units, all over one year, as well as a subjective confirmation by the unit supervisor. The two primary units selected for the study were general surgery and a medical unit with oncology patients. Both case units selected were orthopedic units.

One major change had affected three of the units. The two case units and the general surgery primary nursing unit had all recently had a change in supervision. The new supervisors were well acquainted with the units and the change was seen as positive by nursing administration. The nurses on all four units currently expressed satisfaction with the mode of care delivery practiced.

Sample Selection

General medical-surgical patients discharged over a three-week period from two primary units and from two case units and who met the following criteria were asked to participate in the study: 1) mentally alert and oriented at the time of discharge, 2) able to read and write English, and 3) well enough to respond to the questionnaire. All sample patients at the time of discharge from the hospital required minimal nursing care which put them in categories I or II according to JCAH guidelines. Patients ranging in age from 18 to 100 were admitted to the study. If patients were transferred from another unit to the study units, they were asked to respond to the questions regarding care on the test unit only. Staff selection was limited to registered nurses who had completed orientation on the four units identified.

Measurement of Variables

a. Independent Variable

The independent variable was the type of nursing care delivery system: Primary nursing or case nursing. The two are commonly accepted and utilized systems of nursing care delivery in hospital settings. Both delivery systems are similar in that they do not fragment patient care; they differ in the areas of responsibility and authority of the nurse and continuity of patient care.

Primary nursing is characterized chiefly by individual responsibility and accountability of a single nurse for all aspects of the nursing care of a selected number of patients from admission to discharge. In case nursing, each nurse is responsible for the planning and delivery of care for a group of patients for the duration of one shift. The nurse is

accountable for the care during the shift only, with ultimate 24-hour responsibility and accountability resting with the supervisor.

Designation of units as primary or case units was not based on independent observation of practice. For the purposes of this study, the researcher accepted the hospital's designation of units as using primary or case methods. The criteria used by the hospital to distinguish between primary and case systems are outlined in the "Grid Demonstrating the Primary and Case Systems of Patient Care at a Selected Hospital" (See Appendix A).

The hospital definition of primary nursing did not necessarily correspond with the definition reported in the literature. This is reflected in the method of designating primary nurses for patients on primary units: Patients were selected by the nurse according to individual case load and potential for development of a beneficial nurse-patient relationship. The latter decision was based on individual nurse expertise, area of interest, previous care of the patient, as well as mutual compatibility. Assignment of patients on the case units was made by the lead nurse and was usually based on geographic location.

b. Dependent Variables

Two major dependent variables were chosen: Staff satisfaction and patient satisfaction. The dependent variables of cost and quality of patient care were also considered. Both are important to include in an evaluation of nursing care delivery systems. However, it was felt that the complexity of obtaining and analyzing quality of care and cost data was beyond the scope of this researcher's time and resources and, therefore, they were excluded from the study.

c. Patient Questionnaire: Measure of patient satisfaction

It is difficult to obtain a valid measure of patient satisfaction for the following reasons: 1) patients are likely to deny dissatisfaction with nursing care while in the dependent role of a patient; 2) patients do not know what nursing care they should receive and, therefore, are not capable of making an accurate judgment of the adequacy of the care; and 3) the items used in measures of patient satisfaction often reflect the nurse's values of what quality of care is rather than the patient's perspectives of what care should be. This researcher, however, considered consumers' rights to be included in the evaluation of health services, as supported by the literature, to be of sufficient importance to justify its inclusion in this study despite difficulties in measuring satisfaction (Stern, 1961; Ewell, 1967; Crawford, 1977; Ciske, 1974a).

The questionnaire selected to measure patient satisfaction, adapted from Ciske (1974a), consists of fifteen questions on a Likert-type scale and one open-ended question. Despite the fact that reliability and validity had not been established, the questionnaire was utilized because the specific items had been developed to determine differences between systems of nursing care delivery. Also, since two other studies had used the questionnaire, a comparison of the study findings was possible. Ciske includes fourteen items descriptive of nursing care which can be used to elicit patients' perceptions of what was done for them while they were patients in the hospital. Recognizing that patients are reluctant to criticize nursing care, the researcher tried to minimize the feelings of reluctance to criticize by distributing the questionnaires on the day of discharge from the hospital, emphasizing the fact that questionnaires would not be returned to the hospital.

The questions were revised according to the suggestions by Ciske: Since questions 7, 13, and 14 might not be appropriate for all patients, they were expanded to include a possible choice of "does not apply;" question 10, asking about remembrance of nursing instructions at home, was modified by giving examples of specific nursing instructions; and question 11 was reworded to clarify the term "influence your care" by asking if patients had a say in how or when things were done. To avoid the questionable validity of assuming that presence of the activities (which might differentiate modes of nursing care delivery) necessarily reflected patient satisfaction, the items were used as descriptors of nursing care as perceived by patients. A general statement to assess overall satisfaction with care was added by the researcher (see Appendix B).

All questions were coded so that the highest value was given when the patient indicated the experience occurred "almost all of the time," and the lowest value was given when the patient indicated the experience occurred "almost never." The missing values or missing responses to questions on returned questionnaires were considered by the researcher as indicating indecision on the part of the patient to decide one way or another to the question. These missing questions, along with the responses marked "does not apply" were recoded to have a neutral value.

In Ciske's method of scoring, each item was treated independently. The scoring method in this study was set up to sum responses to items to get an indication of patient overall perception of care. The higher scores indicated that those items deemed to constitute good nursing care were more frequently perceived to have been provided during the

hospitalization. Lower scores indicated that those items deemed to constitute good nursing care were reported to have occurred infrequently during hospitalization.

The questionnaire was pretested using six patients on an oncology unit at a separate hospital where case nursing was practiced. As in-patients, faced with a continuing hospitalization, two of the patients expressed feelings of being overwhelmed with the letter, questionnaire, and consent form. They were not willing to participate by writing their responses, but were willing to verbally participate. All six patients indicated the questionnaire itself was an appropriate length and questions were easily understood. Based on the pretesting, only one adjustment was made in the study: Following an explanation of the questionnaire, patients were given the option of completing the questions verbally rather than in writing if they should so desire.

d. Staff Questionnaire: Measure of nurse satisfaction

Difficulties may arise when trying to obtain a valid measure of nurse satisfaction as well. Some nurses may have been reluctant to share comments if the study had been conducted by nursing administration. Others might not give accurate response if they were concerned about the impact on their present job. However, that was not an issue in this study since the research, though supported by nursing administration, was conducted by an independent researcher. However, items selected could reflect values of nursing administration and nurse educators rather than those items valued by staff nurses. Also, since the questionnaire was developed by a small number of nurse practitioners, it may not reflect staff nurse values.

The questionnaire used in this study was adapted from an unpublished study conducted by Ciske (1976). Using a Likert-type scale, nurses were asked to complete four questions. The first two questions included a list of activities performed by professional nurses. The activities were rated on a scale of 1 to 7 in terms of how important each activity was to their present position and how frequently they were able to accomplish each activity in their present job. Although no measures of reliability and validity have been established, the items do have face validity because they include questions regarding professional values and activities that are thought to vary by nursing care delivery system.

In Ciske's method of scoring, each item was treated independently. Simple correlations were made with each item and the two measures of satisfaction. For this study, the researcher derived a measure of dissatisfaction based on the following rationale: If a nurse believed an activity was an important part of patient care, but was unable to accomplish the activity in practice, the discrepancy would lead to dissatisfaction. Therefore, for each item, actual accomplishment was subtracted from the importance for that item, to obtain a discrepancy score. These scores were summed for all items with the resulting score used to indicate the degree of dissatisfaction. The greater the score, that is the larger the total amount of discrepancy, the greater the amount of dissatisfaction is likely to be. If there is little or no discrepancy in the two scores, the nurse is more likely to be satisfied than if a large discrepancy exists.

The third and fourth questions, also rated on a scale of 1 to 7, spoke to satisfaction with professional practice and with present position

respectively (see Appendix C). The questionnaire was evaluated by pretesting with six case nurses on an oncology unit at a separate hospital. No changes were made as a result of the pretesting.

e. Other Variables

Based on a review of the literature, the researcher selected variables that were found to influence nurses' and patients' perception of and satisfaction with care. Data were collected on the following nurse characteristics: Age, years of experience, level of education, sex, position, leadership role, and shift worked. The patient characteristics included: Sex, age in years, length of stay measured in days of hospitalization, and prognosis. Prognosis was coded according to three classifications: 1) return to normal living, 2) permanently handicapped, and 3) terminal or degenerative processes. All information was obtained from the daily census sheets available at each unit nursing station. The lead nurse or primary nurse was asked to verify the researcher's classification of prognosis when there was a question.

Data Collection

a. The Process

Following pretesting the investigator began collecting data for the study in the following sequence:

1. The professional nurse questionnaire was given to those nurses willing to participate in the study on the four selected units.
2. At this time an explanation of the study was given to the nurses, including the information being collected from patients and the expected outcomes or benefits of the study for professional nurses.

3. During the next three weeks, patients discharged from the four units, who met the sample criteria, were asked to participate in the study.
4. On the morning of discharge, the investigator personally handed the questionnaire to the patients, explained the purpose of the study, obtained a written consent, answered any questions, stressed anonymity, and provided a self-addressed stamped envelope for return of the completed questionnaire.

The information presented verbally was also included in a cover letter which accompanied the questionnaire and served as a reference for the patient at home (see Appendix F).

b. Response Rates

Twenty-five patients from each unit were given questionnaires. Of the 100 patients included in the study, 63 returned questionnaires for an overall response rate of 63%. The response rates for the two systems of nursing care were nearly equal: 32 of the 50 patients on the primary units returned questionnaires (64%) and 31 of 50 patients on the case units returned questionnaires (62%).

Since patients had a choice to participate in the research, those who chose to participate may have been the ones more satisfied with care than those who chose not to participate. To check for possible bias, demographic data collected on all patients (sex, age, length of stay, and prognosis), were used to determine if respondents differed in any significant way from those patients who failed to return the questionnaires. Patients with unfavorable prognoses tended not to return the questionnaires. These patients were found more often on the primary

units. The effect of this was to make respondents from primary and case units comparable with respect to prognosis. Respondents did not differ from non-respondents on other demographic variables.

Questionnaires were distributed to all nurses on the selected primary and case units. Of the 39 nurses on the study units, 32 returned questionnaires for an overall response rate of 82%. The response rates for the two systems of nursing care were the same: 18 of the 22 nurses on the primary units returned questionnaires (82%) and 14 of 17 nurses on the case units responded (82%).

Since nursing staff also had an option to participate, those who chose to participate may have reacted differently to questions than those who chose not to participate. Checks for bias on the nurse sample were not as complete as in the patient sample because the nurses completed most of the demographic information themselves. The researcher was able to compare the respondents to the non-respondents in these three areas: Position, shift, and leadership responsibility. The only difference was seen in the greater percentage of non-respondents on the evening and night shifts. This difference may be explained by the amount of personal contact with the researcher: Daily contact was made with the nurses on the day shift, while only one actual personal contact was made with the other two shifts. Nurses on the evening or night shifts were asked to complete the questionnaire either at the time of that contact or to leave the completed questionnaires on the unit bulletin board marked with the researcher's name. Although the day shift nurses were not repeatedly asked to return completed questionnaires, the presence of the researcher on the units may have been an influence in their response rate. Differences in respondents and non-respondents by

shift might possibly make a difference in nurse satisfaction or perception of care. However, because a proportionate number of nurses from each unit responded, the units were comparable in shift representation.

Characteristics of Respondents

a. Patient Sample

The sample included a total of 29 males and 34 females. The distribution showed there to be more males on the case units and more females on the primary units.

The mean age for the entire sample was 52.8 years with a range from 18 years to 87 years. When age was compared by system of nursing, it was found that the mean age on the primary units (57.4 years) was higher than the mean age on the case units (48.0 years).

The overall mean length of stay was 7.0 days. The minimum was one day and the longest stay was 36 days. Comparison of length of stay to the system of nursing indicated a longer mean of stay on the case units (8.4 days) than on the primary units (5.8 days).

The majority of the patients in the sample were discharged with a favorable prognosis. Comparison of responses by unit demonstrated similar distributions: Twenty-eight primary patients and 26 case patients who were expected to return to normal living; three patients from case units and one patient from a primary unit were permanently handicapped; and those patients whose condition was classified as terminal or rapidly degenerating on primary and case units totaled three and two respectively (see Appendix G).

b. Staff Sample

Although at the time of the study, total staff on the four units was nearly equal, the number of nurses on the primary units was larger than on the case units: Twenty-two nurses on the primary units and 17 nurses on the case units. The difference was due in part to the usage of a greater number of LPN's on the case units.

Demographic information available on all nurses included: Age, years of nursing experience, highest nursing degree held, sex, position (primary nurse, associate nurse, or case nurse), shift, and leadership responsibility (lead nurse, relief lead nurse, or staff nurse).

The mean age on case units was higher than on primary units: 36.2 years and 32.5 years respectively. A few older nurses did not respond to the question on age, therefore, although there was a difference with respect to age, it may have been due to the non-response of some nurses. Likewise, the years of nursing experience was slightly higher on case units than on primary units: 7.9 years and 6.7 years respectively. Again, the difference may be due to the non-response of some nurses.

The educational preparation of nurses was similar on both units with more baccalaureate prepared nurses on the case units. On the primary units, eight nurses were associate degree graduates, six nurses were graduates from a diploma program and four nurses held baccalaureate degrees. By way of cmparison, six nurses on the case units were associate degree graduates, only two nurses were graduates from a diploma program, and six nurses held baccalaureate degrees.

Only three male nurses were included in the sample. Because the number was so small, no further correlations with sex were made.

According to hospital policy, primary nurses were full-time registered nurses who worked on the seven-to-three or three-to-eleven shift and were able to assess, plan, implement and evaluate patient care on an individual basis. Of the eighteen nurses included in the sample from the primary units, ten indicated they were primary nurses and eight were associate nurses. Some of the nurses on the case units had difficulty determining whether they were case nurses or primary nurses; all were classified as case nurses.

Lead nurses on all four units are responsible for management of the unit as well as for patient care of a select number of patients. According to hospital policy, lead nurses are graduates of a baccalaureate school of nursing with a minimum of one year working experience who demonstrated leadership ability and served as a positive primary nurse role model. When the lead nurse was not scheduled to work, the relief lead nurse was responsible for the unit management. Although most of the primary nurses held either a lead position (N=5) or relief lead position (N=3), primary nurses also held staff positions (N=4) (see Appendix H).

CHAPTER III

FINDINGS AND DISCUSSION

Introduction

The presentation of the analysis is organized around the hypotheses guiding the study. It will begin with a comparison of patient satisfaction with care on the different types of units, followed by a comparison of patient perceptions of specific aspects of care. Analysis of the nurse responses will follow a similar format in that a comparison of overall professional and job satisfaction by type of delivery system will be presented first, followed by comparisons of the importance attached to specific nursing activities and the perceived opportunity to accomplish those activities on the different units. Finally, the relationship of nurse satisfaction and patient satisfaction will be presented followed by a discussion of the observations made during the research process.

Neither random assignment nor random sampling were used in selecting the comparison groups of nurses and patients, which makes computation of statistics and probability levels for testing the differences between groups of limited value. Nevertheless, the t-test was used for heuristic purposes to show differences between means on overall scores and on individual items comprising the measures of patient and nurse satisfaction and perceptions of care. The t-tests did not show statistically significant differences between the means of general satisfaction or overall perceptions of care. T-tests on individual items showed significant differences on only the number of items that could have been significant by chance. Therefore, the t-values will not be included and discussion

will focus on a description of those differences of a magnitude considered substantively interesting, though not statistically significant: A mean difference over 0.5 on a five-point or seven-point scale was deemed noteworthy.

Patient Satisfaction by Type of Care Delivery System

According to the first hypothesis, patients on hospital units utilizing the care delivery system of primary nursing will express greater satisfaction with nursing care than patients on units utilizing the care delivery modality of case nursing. To test the hypothesis, the mean differences in response to question fifteen, in which patients were asked to express their general level of satisfaction, were compared. Essentially, no difference in responses to general satisfaction was seen between primary and case units: The mean score on primary units was 4.5 and on case units the mean score was 4.3 (See Table 1, p. 40). Since the possible range of scores was from 1 (very dissatisfied) to 5 (very satisfied), it is clear that the patients on both units tended to report being satisfied or very satisfied with care.

To see if any patient characteristics were related to patient satisfaction and whether the differences in distribution on the two systems could have obscured the difference between types of care, the patient variables were related to the general satisfaction scores. Because satisfaction scores were so high for both groups of patients, there was essentially no difference by the characteristics of age, sex, prognosis, and length of stay.

To analyze patient perception of nursing care, the mean scores for each item were totaled and the means of the total scores were compared.

Table 1.

Mean Scores on Patient Perception of Nursing Care by Type of Unit

Questions	Primary	Case
Question 2: How often were your personal needs, likes and dislikes considered in the way nurses took care of you?	4.4	4.5
Question 3: How often were you aware that nurses were trying to decrease the worries you had because of being in the hospital?	3.8	3.9
Question 4: How often did nurses give you a chance to talk about any complaints or problems?	3.9	4.0
Question 5: How often was a nurse with the doctors when they came in to examine and talk with you?	2.8	3.4
Question 6: How often did nurses check to see if you understood what doctors told you?	3.1	3.9
Question 7: How often did you feel that the nursing staff was helpful to your family during your hospitalization?	3.7	4.1
Question 8: How well informed were you by the nurses about what was happening to you?	4.0	3.8

Table 1.

(continued)

Questions	Primary	Case
Question 9: How much did your nurses seem to know about what was wrong with you that made you come to the hospital?	4.2	3.8
Question 10: When you got home from the hospital, how much did you remember from instructions nurses gave?	4.2	4.6
Question 11: When you were a patient, did you feel you had a say in how or when things were done?	3.8	4.2
Question 12: How often did the nursing staff make you feel you could ask questions and get the help you needed?	4.3	4.3
Question 13: To what extent did you receive help you needed from people other than nurses and doctors?	3.3	3.9
Question 14: Often when people are ill, they cannot do things for themselves. How often did nurses help you with personal needs?	3.8	4.1
Question 15: In general, how satisfied were you with the nursing care you received?	4.5	4.3
Overall Scores (mean)	59.2	61.9

The possible range of scores was fourteen to seventy and the actual range of scores was thirty to seventy. The total score mean for primary patients was 59.2 while the total score mean for the case patients was 61.9 indicating little difference between the types of units (See Table 1, p. 40). Scores from both units were high, reflecting the tendency of patients to report having frequently received care depicted in the items.

Comparison of patient responses to each question comprising the overall patient perception scale showed differences by type of care modality on only a few items. As might be expected in response to question one, "Was there one nurse who took care of you more often than other nurses did and seemed to be in charge of your care," primary patients were more often able to identify one nurse who took care of them than were case patients: Nineteen primary patients answered yes and ten said no, while thirteen case patients answered yes, twelve said no, and three indicated they didn't know. Three patients from each system did not respond. In one other question, the mean from the primary patients was only slightly higher than the mean for the case units. Responses to question nine, "How much did your nurses seem to know about what was wrong with you that made you come to the hospital," seemed to indicate that primary patients believed their nurses were more knowledgeable about why they were admitted for hospitalization than case patients (primary mean 4.2; case mean 3.8).

On the majority of items, patients on case units had slightly higher scores than on the primary units. The differences were not large enough to be either statistically significant or substantively important. The mean response to question five, "How often was a nurse with the

doctors when they came in to examine and talk with you," was higher for case than for primary units (3.4 and 2.8 respectively). This indicated that nurses were more frequently observed to be present when doctors made rounds on case units than on primary units. This was the only item on which the mean score was below three, the neutral response. Similarly, the mean response to question six, "How often did nurses check to see if you understood what the doctors told you" was higher for case than for primary units (3.9 and 3.1 respectively). Case nurses more often than primary nurses were noted to check patients' understanding of doctors' instructions or explanations. Since the primary nursing system theoretically creates a system of care where patient/nurse/physician interaction is increased, the differences on these two items were especially surprising. In response to question thirteen, "To what extent did you receive help you needed from people other than nurses and doctors," case patients indicated they received needed help from people other than nurses and doctors more often than primary patients (3.9 and 3.3 respectively) (See Table 1, p. 40).

Question sixteen was open-ended, allowing the patients to identify what one factor they felt best contributed to good nursing care. Responses were categorized as referring to medical/physical care and interpersonal care. Those responses that were in the medical/physical category included such statements as: Knowledge of nursing duties, meeting patient physical needs, and answering calls promptly. Caring, friendliness, concern, and interest in patients are examples of responses in the interpersonal category. There was no difference in types of responses by nursing system.

Some patients on primary units might not have been assigned to primary nurse assignments and some patients on case units may have been

assigned on a continuing basis, approximating the continuity achieved on the primary units. Therefore, data were analyzed controlling for patient responses to question one, "Was there one nurse who took care of you more often than other nurses and seemed to be in charge of your care?" On the primary units, patients' satisfaction with care as well as their perceptions of nursing care were more positive for those patients who reported having the same nurse most of the time than those who did not have one nurse most of the time. However, the opposite was found on the case units: Patient responses to satisfaction and perception of nursing care were more positive for those patients who reported not having the same nurse most of the time (See Appendix I for a detailed breakdown by item). There is no obvious explanation for these interaction effects. A similar analysis was reported in a study utilizing the same questionnaire (McCarthy & Schifalacqua, 1977). Their findings indicated patient responses to the other items in the questionnaire were more positive in the group of patients having the same nurse most of the time. However, comparison of responses between types of units was not reported.

Nurse Satisfaction by Type of Care Delivery System

The second hypothesis of the study states that professional nursing staff on hospital units utilizing the care delivery modality of primary nursing will express greater job satisfaction than nursing staff on units utilizing the case method care delivery system of total patient care. To test the hypothesis nurses were asked to respond to two questions assessing satisfaction on a scale of 1 to 7; one regarding professional satisfaction, and another job satisfaction. Response to the question on

professional satisfaction indicated that nurses within the primary system of nursing care delivery were somewhat more satisfied professionally (5.7 mean) than nurses within the case system (5.1 mean) (See Table 2). Similarly, response to the question on job satisfaction indicated that nurses on primary units were slightly more satisfied with their present job (5.8 mean) than nurses on case units (5.4 mean). Responses to the two questions indicated essentially no difference between the two systems in relation to both questions on satisfaction, though the mean score on primary units was slightly higher than on the case units in terms of both professional and job satisfaction.

Nurses were also asked to respond in two ways to a list of eleven nursing activities. First, they were asked to rate the activities according to how important they were to their professional practice. Then they were asked to indicate how often they were able to actually accomplish the activities.

Responses were also analyzed by comparing the overall mean scores for importance and accomplishment as well as the means of each activity according to the system of nursing care delivery. In terms of importance, the overall mean score for the case units (71.0) was slightly higher than on primary units (67.5) and case units consistently rated higher the importance of each nursing activity. (See Table 2, p. 46). The difference between means was greatest for two activities: 1) teaching patient and family (primary mean 5.7; case mean 6.4) and 2) developing nursing care plans from patient problems (primary mean 5.2; case mean 5.9). Activities with a lesser degree of difference included providing psychological support to patient and family, participating in staff education, and

Table 2.

Mean Scores of Importance, Accomplishment and Dissatisfaction of Specific Nursing Activities by Type of Unit

Nursing Activities		Importance	Accomplishment	Dissatisfaction
1. Assessing patinets	P	6.7	6.2	0.5
	C	6.8	5.5	1.3
2. Providing psychological support to patients and family	P	6.1	5.2	0.9
	C	6.6	5.1	1.5
3. Teaching patients and family	P	5.7	4.6	1.1
	C	6.4	4.6	1.8
4. Participating in staff education	P	5.1	4.1	1.0
	C	5.6	4.1	1.5
5. Evaluating care you give patients	P	5.8	5.5	0.3
	C	6.3	5.6	0.7
6. Developing nursing care plans	P	5.2	3.9	1.3
	C	5.9	4.9	1.0
7. Carrying out MD orders	P	6.6	6.8	0.2
	C	6.9	6.4	0.5
8. Being accountable for nursing actions	P	6.8	6.8	0.0
	C	7.0	6.5	0.5
9. Maintaining therapeutic relationships with patients	P	6.4	6.1	0.3
	C	6.5	5.9	0.6

Table 2.

(continued)

Nursing Activities		Importance	Accomplishment	Dissatisfaction
10.	Collaborating with other health team members	P 6.3 C 6.4	5.7 4.9	0.6 1.5
11.	Giving or assisting patients in total care	P 6.6 C 6.6	6.0 6.1	0.6 0.5
	Overall Mean Score	P 71.0 C 67.5	60.8 59.6	11.4 6.7

P = Primary Nursing System

C = Case Nursing System

evaluating care given patients. The remaining activities were rated similarly in importance by nurses in both systems.

Essentially no difference was found between systems in terms of accomplishment: The primary system overall mean score on accomplishment (60.8) was slightly higher than the overall mean score on case units (59.6). The difference between means on specific nursing activities was greatest in two areas of accomplishment: 1) assessing patients (primary mean 6.2; case mean 5.5) and 2) collaborating with other health team members (primary mean 5.7; case mean 4.9). In two other activities the mean differences in accomplishment were smaller: Carrying out MD orders and being accountable for nursing actions. In the area of developing nursing care plans from patient problems, the case nurses indicated they were able to accomplish this activity more regularly than the primary nurses (primary mean 3.9; case mean 4.9). The remaining activities were rated similarly by nurses in both systems (See Table 2, p. 46).

By subtracting the accomplishment score from the importance score for each activity and summing the difference, the researcher was able to arrive at a dissatisfaction score for each respondent. The assumption was that the greater the discrepancy between importance and accomplishment, the greater the degree of dissatisfaction. The validity of this assumption is supported by the strong negative correlation that was found to exist between the expressed satisfaction and the discrepancy scores ($r = -0.5$ for professional satisfaction and $r = -0.4$ for present job satisfaction).

The overall discrepancy score was higher on the average in the case nursing system (11.4) than in the primary nursing system (6.7) (See Table 2, p. 46). Three activities seemed to account for the differences between

systems: 1) assessing patients (primary 0.5; case 1.3); 2) carrying out M.D. orders (primary -0.2; case 0.5); and 3) collaborating with other health team members (primary 0.6; case 1.5). Scores for other activities varied to a lesser degree.

Only some of the nurses on the primary units are actually practicing as primary nurses while others are functioning as associate nurses, those who provide care when the primary nurse is not on duty. Because of this, satisfaction could vary with the differences in position: Primary nurses with increased responsibility and accountability might be more satisfied than associate nurses who are denied the opportunity to practice this way. If this were the case, pooling the responses would obscure the differences and account for the failure to find differences between types of units. Therefore, the primary sample was regrouped according to the position of the nurse: Primary or associate. When the results were compared, it was found that the differences did exist. Paradoxically, however, associate nurses indicated they were more satisfied professionally and in their present job than either primary or case nurses regardless of the satisfaction measure used (See Table 3).

Table 3.

Mean Scores on Different Measures of Satisfaction by Position

Satisfaction Measure	Primary N=12	Associate N=10	Case N=17
How satisfied are you professionally?	5.5	6.0	5.1
How satisfied are you with your present job?	5.6	5.9	5.4
Discrepancy Score (Dissatisfaction)	9.0	3.9	11.4

Because greater differences in satisfaction scores between the two systems had been found when the sample was regrouped according to position, mean scores of importance and accomplishment were also compared by position. Results indicated that case nurses placed a higher value on the specific nursing activities than either primary or associate nurses. In the area of accomplishment of nursing activities, however, the associate nurses had a higher overall score than either primary nurses or case nurses. Comparison of means between the three groups showed that primary nurses never indicated they were able to accomplish the nursing activities more often than at least one of the other two positions.

The greatest differences are seen in four activities: First, associate nurses were able to accomplish patient assessment more frequently (6.6) than either primary nurses (5.9) or case nurses (5.5). Second, case nurses indicated they were able to develop nursing care plans from patient problems more often (4.9) than primary nurses (4.5) or associate nurses (3.3). Third, associate nurses reported they were able to maintain therapeutic relationships with patients more regularly (6.6) than primary nurses (5.7) or case nurses (5.9). Fourth, collaborating with other health team members was accomplished more often by associate nurses (6.0) than by primary nurses 5.4) or case nurses (4.9). Lesser degrees of difference existed between the positions in the other activities; however, in each remaining activity, the associate nurses indicated they were able to accomplish more than either the primary or case nurses (See Table 4).

Table 4.

Mean Scores on Accomplishment of Nursing Activities by Position

Activities	Primary N=12	Associate N=10	Case N=17
1. Assessing patients	5.9	6.6	5.5
2. Providing psychological support	4.9	5.5	5.1
3. Teaching patients and family	4.4	4.8	4.6
4. Participating in staff education	3.8	4.4	4.1
5. Evaluating care you give patients	5.2	5.9	5.6
6. Developing nursing care plans	4.5	3.3	4.9
7. Carrying out MD orders	6.7	6.9	6.4
8. Being accountable for actions	6.6	7.0	6.5
9. Maintaining therapeutic relationships	5.7	7.0	6.5
10. Collaborating with health team members	5.4	6.0	4.9
11. Assisting patients in total care	5.8	6.3	6.1

An explanation for the differences between primary and associate nurses may be related to the leadership role: Although some primary nurses held staff positions, most held either a lead or relief lead position, whereas associate nurses were all staff nurses. Therefore, the lesser accomplishment scores of primary nurses may be due to the increased management responsibilities of primary nurses.

It would seem likely that differences on the two types of units may be differences in the educational preparation of nurses on the two systems: More baccalaureate graduates were on the case units. Assuming that baccalaureate level education would lead nurses to rate the nursing activities more highly in importance than associate degree programs or diploma

programs of nursing, if the baccalaureate prepared nurses were unable to accomplish those activities, they would also be more frustrated which would lead to lower scores of satisfaction both professionally and with their present job.

However, in this study, the preceding assumption did not hold true. Although there were essentially no differences in mean scores of importance between the three programs, diploma graduates placed a slightly higher value on the selected nursing activities. Associate graduates indicated they were able to accomplish more of the activities and were also found to have the lowest dissatisfaction score. Diploma graduates indicated they were not able to accomplish the activities as frequently as either baccalaureate or associate degree nurses and therefore had the highest dissatisfaction score.

Therefore, although the initial assumption was not supported by this study, educational preparation may offer a clue to the slight differences between the two systems of care: Since there were more baccalaureate prepared nurses on the case units, and more diploma graduates on the primary units, the differences between systems may have been obscured by the differences between educational preparation of the nurses (See Table 5).

Table 5.

Mean Scores of Importance, Accomplishment and Dissatisfaction of Nursing Activities According to Educational Preparation

Education	Importance	Accomplishment	Dissatisfaction
Diploma Graduate	69.4	56.3	13.1
Associate Degree	69.0	61.5	7.5
Baccalaureate Degree	68.9	59.5	9.4

Relation of Nurse Satisfaction to Patient Satisfaction

The third hypothesis states that patients on hospital units where nursing staff satisfaction is high will express greater satisfaction with nursing care than patients on units where nursing satisfaction is low. To test the hypothesis, the mean scores of patient expressed satisfaction were ranked by unit and compared with similarly ranked mean scores of nurse professional and job satisfaction. On all measures of satisfaction, nurses on the medical-oncology unit ranked number one, indicating greater satisfaction with their present job than nurses on other units. Similarly, patients on the medical-oncology unit ranked satisfaction with nursing care slightly higher than on the other units (See Table 6).

Table 6.

Overall Mean Scores of Nurse Satisfaction by Unit Compared with Overall Mean Scores of Patient Satisfaction by Unit

	Primary		Case	
	Surgery	Medical	Ortho	Ortho
$\bar{X}$ Nurse Professional Satisfaction	5.3	6.1	4.6	5.6
$\bar{X}$ Nurse Job Satisfaction	5.2	6.2	5.1	5.7
$\bar{X}$ Nurse Dissatisfaction	8.9	6.0	12.0	12.0
$\bar{X}$ Patient Satisfaction	4.4	4.6	4.3	4.3

Observations

An explanation for the little or no differences seen either in patient satisfaction or nurse satisfaction by type of unit may be related to the observations made by the researcher. During the data gathering process, the researcher had the opportunity to observe the two systems of nursing care in practice as well as the reactions of nurses to the research process. The observed differences between type of unit in actual practice were not as different as claimed by the hospital.

It was noted that not every patient on the primary units was assigned to a primary nurse within 24 hours of admission as stated in hospital policy. On the surgical unit, primary nurses covered a specific geographic unit and patients became part of the nurses case load as they were admitted to that area. If a primary nurse was not scheduled to work for a three-day or four-day period, the patients admitted to that geographic area were not assigned a primary nurse for those days. Patients on the medical-oncology unit were assigned individually according to the nurses' case load. If primary nurses felt they already had a heavy case load of primary patients, the newly admitted patient was not assigned a primary nurse, sometimes for the duration of their stay.

Also observed on the medical-oncology unit was the failure of primary nurses to assume responsibility and authority for planning patient care on a 24 hour basis. Primary nurses indicated to the researcher that associate nurses on other shifts did not accept the authority of the primary nurse in planning patient care and actually changed the care plans prior to consulting the primary nurse, for example, on the scheduling of pain medications. The primary nurses stated they accepted this behavior

because the associate nurses were also registered nurses with equal assessment skill and judgment. To avoid confrontation and added stress to the work setting, the failure of the associate nurses to accept the primary nurses' authority was merely accepted by primary nurses.

Lack of difference was confirmed by the reaction of the staff to the reserach. During the research process, the medical-oncology staff seemed to be intimidated by the study comparing their system of primary nursing with case nursing. Almost daily the nurses questioned the researcher about the study results: Was the researcher able to see any differences between the two systems? Did patients or nurses on the case system seem more satisfied with nursing care than those on the primary units? Unknown to the researcher, the medical-oncology nurses asked to meet with the nurses from the surgical unit also involved in the study to compare practices of primary nursing. One outcome of that meeting was that the medical-oncology nurses began using the obvious differences between the practice of primary nursing on the two units (geographic assignment of patients versus case load assignment) to defend their practice of not assigning all patients to a primary nurse. The issues of 24-hour responsibility and authority for patient care were avoided.

The surgery unit expressed insecurity with primary nursing in a different manner. These nurses began criticizing the staffing pattern indicating they could not meet patient needs with such a limited staffing schedule. These nurses also demanded a meeting with the supervisor to discuss a more equal distribution of work on all shifts. They needed reassurance that primary nurses had the authority to plan patient care in such a manner that the day shift did not assume the heaviest responsibility.

For example, if a patient was used to having a bath or shower in the evening, that schedule could be maintained in the hospital. The day shift primary nurses stated the associate nurses on other shifts would not accept or follow that authority.

Although expressed in different ways, both primary units seemed threatened by the research process. The major concern on both units seemed to be the issue of 24 hour responsibility and authority for a plan of care, which, theoretically, are the distinctive features of primary nursing and which were not actually practiced on the so-called primary units.

The research process had no visible effect on the case units. The nurses expressed interest in the study and were helpful in notifying the researcher of patients being discharged. Several case nurses indicated they preferred the case system because they would not want to have the 24 hour responsibility they assumed was characteristic of primary systems.

CHAPTER IV

SUMMARY AND CONCLUSIONS

Summary of the Findings

The hypothesis that patients on hospital units utilizing the care delivery system of primary nursing will express greater satisfaction with nursing care than patients on units utilizing the care delivery modality of total patient care was not substantiated. No difference was found to exist between systems: Although case patients had a slightly higher total mean score on nursing care received, primary patients had a slightly higher mean satisfaction with nursing care.

The hypothesis that professional nursing staff on hospital units utilizing the care delivery modality of primary nursing will express greater job satisfaction than nursing staff on units utilizing the care delivery system of total patient care was also not substantiated. Case nurses placed a higher value or importance on the selected nursing activities than primary nurses; however, case nurses also had the greatest difference in mean scores between what they believed were important nursing activities and what they were actually able to accomplish in their system of nursing care.

Because there was little variation between units in terms of either patient satisfaction or staff satisfaction, the hypothesis that patients will express greater satisfaction with nursing care on units where nurses express greater satisfaction could not be answered conclusively. The pattern indicated, however, that patients do express greater satisfaction

on units where nurses also express greater satisfaction.

In conclusion, no differences were found between the two systems of nursing care delivery as practiced at the particular hospital. Because of the slight differences between the two systems as practiced, no conclusions can be made regarding the differences between primary and case nursing as practiced in other hospital settings.

Implications for Further Research

Because the test units were more similar than expected, the hypotheses were not adequately tested. Therefore, additional research comparing primary and case methods of nursing care delivery should be conducted before recommendations for practice are made. In order to determine the extent to which definitions of modes of care agree with actual practice on nursing units, the following observations should be part of the process of selecting units to be compared: 1) method of assignment of patients; 2) the extent to which authority is decentralized; 3) continuity of care as outlined in the nursing care plan; 4) authority assumed by staff nurses; and 5) time span of responsibility.

To aid in the interpretation of results, additional information from patients would also be useful. Interviews with patients to obtain more specific reasons for general satisfaction with nursing care would be valuable. A probe to discover what led to satisfaction or dissatisfaction might yield information to use in developing a more accurate measurement of patient satisfaction. And further, discussion regarding responses to an openended question, eliciting responses about what patients think is the most important indicator of good nursing care, might lead to a better understanding of what nursing care is important to patients.

In future research, it would be desirable to control for the type of patients on the compared units. A situation where units were more comparable with respect to medical diagnosis and prognosis would ensure that observed differences are more likely to be the result of the differences between systems of care delivery rather than response to other variables. For example, on the oncology unit, nurses might have more authority in nursing care planning than on an orthopedic or surgical unit, leading to differences in nurse and patient satisfaction as well as differences in quality of care measures.

Another area that may profit by investigation is how the actual service demands of the units impact the effectiveness of the system of nursing utilized. In other words, is primary nursing the system of choice for all nursing units, or do different systems more effectively meet the needs of patients and nurses on different types of nursing units?

Before primary nursing or case nursing is recommended for practice, nurse administrators need to evaluate the cost/benefit ratio: Specifically, even if no differences are found to exist between the systems in terms of quality of care, patient satisfaction and nurse satisfaction, the differences in cost of the two systems must be considered.

Since the provision of a high quality of care is the main purpose of nursing, measures to evaluate both patient outcomes and nurse performance are essential. By using the standards of care set by individual units to measure quality of care, the differences between systems of nursing in terms of quality of care as well as paitnet satisfaction and nurse satisfaction may become more apparent.

The interaction between type of unit and identification of one nurse responsible for care in explaining satisfaction should be investigated

further. A re-analysis of other reported data may be helpful in interpreting the study findings. In another study, utilizing the same patient questionnaire, primary and team units were compared (McCarthy & Schiffalacqua, 1977). Responses to the question, "Was there one nurse who seemed to be in charge of your care," indicated that primary patients were able to identify one nurse as responsible for their care. However, no comparison of results was reported with the team system. Therefore, the question arises: Was there a difference in perception of care for team patients who were not able to identify one nurse as responsible for their care?

Another interesting finding in this study was the higher discrepancy scores or greater dissatisfaction of primary nurses compared to associate nurses. These results were surprising because the assumption that primary nursing leads to increased nurse satisfaction based on the change in nurse responsibility to a more autonomous professional role was not supported. Research should be conducted to look more closely at the relationship of autonomy and satisfaction.

The literature reported differences in quality of care due to the nursing leadership of a clinical specialist (Corpuz, 1977). Further study that examined the different systems of nursing in terms of educational preparation of unit leadership (supervisors, lead nurses, and relief lead nurses), and staff satisfaction and patient perception of care would further add to an understanding of the relationship of quality of care and leadership roles.

Finally, more intra-hospital and across-hospital studies comparing all methods of nursing care delivery (primary, case, and team) would

further contribute to the existing body of knowledge of systems of nursing and their effects on patient satisfaction, nurse satisfaction, and quality of patient care. Research evaluating the mode of care delivery in a variety of settings would provide more confidence in the general applicability of the findings.

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APPENDICES

Appendix A

A GRID DEMONSTRATING THE PRIMARY AND CASE SYSTEMS OF PATIENT CARE AT A SELECTED HOSPITAL

Function	Primary Nursing	Case Nursing
Accountability	-Clearly defined -Total to patient family	-Not clearly defined -Group and shift oriented
Authority	-Explicit for a certain number of assigned patients	-Through lead nurse
Period of Responsibility/ Continuity	-Admission to discharge (24 hours) or transfer off unit -Care planner is care giver -Continuity in planning & delivery for entire hospital stay -Integration of daily activities by one person -Continuous evaluation by a professional nurse	-Per shift -Lead nurse assigns and supervises care -Fragmentation - no one is patient advocate -Daily care delivered according to nursing skills and levels -Less frequent evaluation by a professional nurse
Planning	-Patient involvement at bedside -Takes less time -Patient goals take priority	-Unit conference away from patient -More time needed to receive input from all team members -May indicate nurses goals

Appendix A

(continued)

Function	Primary Nursing	Case Nursing
Decision Making	-Resides with the nurse having most knowledge of patient (care giver) -24-hour responsibility means continuity	-Not usually with the care giver --possibly by a lead nurse who has less direct patient information -Shift oriented
Communication	-Questions--patient to primary nurse/associate nurse to physician -Consultation--patient to primary nurse to others	-Questions--patient to nursing assistant/LPN to lead nurse to physician and back down the line again -Consultation--patient to nursing assistant/LPN to lead nurse to others
Patient &/or Family Teaching	-Consistent -Individualized by primary nurse	-Inconsistent -As delegated by staff nurse
Assignment	-Beneficial relationship between patient and nurse	-Mostly geographic
Collaboration with Physicians	-Primary nurse to physician -Consistent collegial relationship	-Staff nurse or lead nurse to physician -Inconsistent relationships
Preparation for Discharge	-Planned by primary nurse with patient -Primary nurse coordinates activities among departments	-Inconsistent planning by staff nurse, lead nurse, or physician -Delegated coordination of activities among departments

Appendix B

QUESTIONNAIRE REGARDING CARE GIVEN BY NURSES

Please circle the answer that comes closest to your opinion regarding your nursing care while you were a patient.

1. Was there one nurse who took care of you more than other nurses did and seemed to be in charge of your care?

   yes no don't know

2. How often were your personal needs, likes and dislikes considered in the way nurses took care of you?

   almost always (80-100% of the time) | very often (60-80%) | often (40-60%) | seldom (20-40%) | almost never (less than 20%)

3. How often were you aware that nurses were trying to decrease the worries you had because of being in the hospital?

   almost always (80-100% of the time) | very often (60-80%) | often (40-60%) | seldom (20-40%) | almost never (less than 20%)

4. How often did nurses give you a chance to talk about any complaints or problems?

   almost always (80-100% of the time) | very often (60-80%) | often (40-60%) | seldom (20-40%) | almost never (less than 20%)

5. How often was a nurse with the doctors when they came in to examine and talk with you?

   almost always (80-100% of the time) | very often (60-80%) | often (40-60%) | seldom (20-40%) | almost never (less than 20%)

6. How often did nurses check to see if you understood what the doctors told you?

   once a day less than once a day never

7. How often did you feel that the nursing staff was helpful to your family during your hospitalization?

   almost always (80-100% of the time) | very often (60-80%) | often (40-60%) | seldom (20-40%) | almost never (less than 20%) | does not apply

Page 2

8. How well informed were you by nurses about what was happening to you?

very informed | adequately | poorly informed

9. How much did your nurses seem to know about what was wrong with you that made you come to the hospital?

very much | most of what was important | very little | nothing

10. When you got home from the hospital, how much did you remember from instructions nurses gave, such as how to take your medicines or do your treatments?

all of what I should do | most of what I should do | very little | nothing

11. When you were a patient, did you feel you had a say in how or when things were done?

almost always (80-100% of the time) | very often (60-80%) | often (40-60%) | seldom (20-40%) | almost never (less than 20%)

12. How often did the nursing staff make you feel you could ask questions and get the help you needed?

almost always (80-100% of the time) | very often (60-80%) | often (40-60%) | seldom (20-40%) | almost never (less than 20%)

13. To what extent did you receive help you needed from people other than nurses and doctors? (like dieticians, social workers, etc.)

almost every time it was needed (80-100%) | very often (60-80%) | often (40-60%) | seldom (20-40%) | almost never (less than 20%) | does not apply

14. Often when people are ill, they cannot do things for themselves that they ordinarily do regarding bathing and personal cleanliness. How often did nurses help you with these needs?

almost every time it was needed (80-100%) | very often (60-80%) | often (40-60%) | seldom (20-40%) | almost never (less than 20%) | does not apply

15. In general, how satisfied were you with the nursing care you received?

extremely satisfied | very satisfied | satisfied | dissatisfied | extremely dissatisfied

16. What do you think is the most important indicator of good nursing care?

Appendix C

STAFF NURSE QUESTIONNAIRE

ACCOMPLISHMENT OF PROFESSIONAL ACTIVITIES

Unit _____ Age _____ Highest nursing degree held:

Years of nursing experience _____ A.D. Grad ____ B.S. Grad ____

Position: primary nurse _____ Diploma Grad ____ Masters ____

associate nurse _____ case nurse _____ Shift worked _____

1. Listed below are activities demonstrating professional nursing practice. Would you rate each activity in terms of how important it is to you on a scale of 1-7 by placing the number on the line following each item?

ACTIVITY	IMPORTANCE: extremely unimportant 1-2-3-4-5-6-7 extremely important
1) Assessing patients	_____
2) Providing psychological support to patients and family	_____
3) Teaching patients and family	_____
4) Participating in staff education	_____
5) Evaluating care you give patients	_____
6) Developing nursing care plans from patient problems (includes nursing orders, care conferences)	_____
7) Carrying out MD orders (includes adaptations to patient, safety, questioning)	_____
8) Being accountable for your nursing actions	_____
9) Maintaining therapeutic relationship with patients	_____
10) Collaborating with other health team members (communicating, planning)	_____
11) Giving or assisting patients in total care based on assessed needs	_____

Appendix C
continued

2. Listed below are the same nursing activities demonstrating professional nursing practice. Would you indicate how often you accomplish each activity in your present job on a scale of 1-7, by placing the number on the line by each item?

ACTIVITY	ACCOMPLISHMENT not at all 1-2-3-4-5-6-7 always
(1) Assessing patients	_____
(2) Providing psychological support to patients and family	_____
(3) Teaching patients and family	_____
(4) Participating in staff education	_____
(5) Evaluating care you give patients	_____
(6) Developing nursing care plans from patient problems (includes nursing orders, care conferences)	_____
(7) Carrying out MD orders (includes adaptations to patient, safety, questioning)	_____
(8) Being accountable for your nursing actions	_____
(9) Maintaining therapeutic relationship with patients	_____
(10) Collaborating with other health team members (communicating, planning)	_____
(11) Giving or assisting patients in total care based on assessed needs	_____

3. How satisfied are you with your accomplishment of professional practice in your present job? (circle one)

extremely dissatisfied 1 2 3 4 5 6 7 extremely satisfied

4. How satisfied generally are you with your present job? (circle one)

extremely dissatisfied 1 2 3 4 5 6 7 extremely satisfied

Appendix D

University of Oregon Health Sciences Center
Study Participant Consent Form

I, _____, have been asked to participate in the study entitled: A Comparative Study of Primary and Case Methods of Nursing Care Delivery in Terms of Patient Satisfaction and Staff Satisfaction. The hospital as well as the nursing profession are interested in what I, the consumer, think about the nursing care I received while a patient. I understand this study is being conducted under the guidance of Ethel Griffith, assistant professor at the University of Oregon Health Sciences Center.

1. If I agree to participate in this study, I will be given a set of sixteen (16) questions to answer after my discharge from the hospital.

2. A self-addressed, stamped envelope will be provided for me to return the completed questions to Marjorie Broyer.

3. By participating in this study, I will be helping to find ways of providing nursing care that are more satisfying to me, the consumer of health care.

4. I realize my responses to the questions will not be considered as criticism of the nurses, but will help identify the differences in the two systems of nursing care.

5. I understand that my responses to questions will remain anonymous.

6. I understand I may refuse to participate, or withdraw from this study at any time without affecting my relationship with, or treatment at the hospital.

7. It is not the policy of the Department of Health, Education, and Welfare, or any other agency funding the research project in which I am participating, to compensate or provide medical treatment, for human subjects in the event the research results in physical injury. The University of Oregon Health Sciences Center, as an agency of the State, is covered by State Liability Fund. If I suffer any injury from the research project, compensation would be available to me only if I establish that the injury occurred through the fault of the Center, its officers or employers. If I have further questions, I may call Dr. Michael Baird, M.D., at (503) 225-8014.

8. I have read the foregoing and agree to participate in this study.

_____ _____
Witness Patient

_____ _____
Date Date

Appendix E

University of Oregon Health Sciences Center
Professional Nurse Consent Form

I, _____, have been asked to participate in the study: A Comparative Study of Primary and Case Methods of Nursing Care Delivery in Terms of Patient Satisfaction and Staff Satisfaction. The hospital as well as the nursing profession are interested in how satisfied I am with the system in which I am presently practicing. I understand this study is being conducted under the guidance of Ethel Griffith, assistant professor of nursing at the University of Oregon Health Sciences Center.

1. If I agree to participate in this study, I will be given a set of four (4) questions to answer.

2. Completed questionnaires will be returned to Marjorie Broyer.

3. By participating in this study, I will be helping to find ways of providing nursing care that are more satisfying to me, in both professional satisfaction and job satisfaction.

4. I realize my responses must be answered as honestly and as accurately as possible to help identify the differences between the two systems of nursing care.

5. I understand that my responses to questions will remain anonymous.

6. I understand that I may refuse to participate, or withdraw from this study at any time without affecting my relationship with, or treatment at the hospital.

7. It is not the policy of the Department of Health, Education, and Welfare, or any other agency funding the research project in which I am participating, to compensate or provide medical treatment, for human subjects in the event the research results in physical injury. The University of Oregon Health Sciences Center, as an agency of the State, is covered by State Liability Fund. If I suffer any injury from the research project, compensation would be available to me only if I establish that the injury occurred through the fault of the Center, its officers or employers. If I have further questions, I may call Dr. Michael Baird, M.D., at (503) 225-8014.

8. I have read the foregoing and agree to participate in this study.

_____ _____
Witness Professional Nurse

_____ _____
Date Date

Appendix F

February 5, 1980

Dear Health Care Consumer,

As you may recall from our brief discussion the morning you were discharged from the hospital, I am conducting a study comparing patient satisfaction with nursing care.

At this time the hospital uses two nursing care delivery systems. The hospital as well as the nursing profession are interested in how you, the consumer, view the nursing care you received. Your responses to the questions will not be considered as criticism of the nurses, but are worded to determine the differences in the two systems of nursing care. The hospital is not conducting this study, however, the study results will be shared with the administration. You may be assured that your responses will remain anonymous.

Please return the completed questionnaire to me in the self-addressed envelope provided by March 1, 1980.

Thank you for helping to find better ways of providing nursing care.

Sincerely,

Marjorie L. Broyer, R.N.
Graduate Nursing Student
University of Oregon
Health Sciences Center

Appendix G

Comparison of Respondents and Non-Respondents on Primary and Case Units by Prognosis and Sex

	Primary System				Case System			
	Surgery		Medical		Orthopedic		Orthopedic	
	N	R	N	R	N	R	N	R
Distribution:	5	20	13	12	12	13	7	18
Prognosis:								
Return to Normal Living	5	20	6	8	9	13	6	13
Handicapped				1			1	3
Terminal			7	3	3			2
Sex:								
Male	1	7	2	4	5	6	3	12
Female	4	13	11	8	7	7	4	6

Appendix H

Description of Nurse Sample by Type of Unit

Variables	Primary System		Case System	
	Surgery (N=9)	Medical (N=9)	Orthopedic (N=7)	Orthopedic (N=7)
Position:				
Primary	5	5		
Associate	4	4		
Case			7	7
Degree:				
Associate	4	4	2	4
Diploma	3	3		2
Baccalaureate	2	2	5	1
Shift:				
7 - 3	5	5	3	5
3 - 11	3	1	3	1
11 - 7	1	3	1	1
Responsibility:				
Lead	2	2	3	2
Relief Lead	3	3	2	2
Staff Nurse	4	4	2	3
Years of Experience:	5.3 (N=7)	4.7 (N=8)	11.0 (N=6)	8.1 (N=7)
Age: (mean)	33.0 (N=9)	31.9 (N=7)	28.6 (N=7)	43.8 (N=6)

Appendix I

Mean Scores of Patient Perceptions of Nursing Care by Unit According to Response to the Question: Was one Nurse in Charge of Your Care?

	Primary		Case	
Question Number	Yes	No	Yes	No
2	4.6	4.3	4.4	4.7
3	4.3	3.5	3.8	4.0
4	4.2	3.7	3.8	4.2
5	3.1	2.6	2.8	3.7
6	3.2	3.0	3.8	4.1
7	4.1	3.6	4.3	4.1
8	4.5	3.8	3.8	3.8
9	4.4	4.1	3.5	3.7
10	4.5	4.1	4.5	4.8
11	4.2	3.2	4.2	4.1
12	4.8	3.6	4.0	4.5
13	3.9	2.3	3.9	4.1
14	4.1	3.8	3.7	4.6
15	4.7	4.2	4.0	4.6

AN ABSTRACT OF THE THESIS

MARJORIE L. BROYER

For the MASTER OF NURSING

Date of Receiving this Degree: June 8, 1980

Title: A COMPARATIVE STUDY OF PRIMARY AND CASE METHODS OF NURSING CARE DELIVERY IN TERMS OF PATIENT SATISFACTION AND STAFF SATISFACTION AT A SELECTED HOSPITAL

Approved: _____

Joyce A. Semradek, M.S.N., Thesis Advisor

Researchers claim that primary nursing is the most appropriate approach for meeting the needs and expectations of consumers and nursing staff (Corpuz 1977; Christman 1976; Marram 1976). However, most of the claims for primary nursing are based on a comparison of primary and team systems of nursing rather than on comparisons of primary and case nursing. Therefore, the present study was undertaken to ascertain if primary nursing leads to greater patient and nurse satisfaction than case nursing.

The hypotheses generated were: that patients on primary units would be more satisfied with care than patients on case units; that nurses on primary units would be more satisfied with their practice of nursing than nurses on case units; and that patients would be more satisfied with nursing care on units where nurses were also more satisfied.

Sixty-three patients (distributed evenly between the two types of units) responded to questions that elicited responses to general satis-

faction and perceptions of care actually performed. Thirty-two nurses (distributed evenly between the two types of units) responded to a questionnaire that arrived at a measure of dissatisfaction by comparing the importance of specific nursing activities with the actual accomplishment of the same activities. Both the patient and nurse questionnaires were designed to reflect the expected differences between the two systems of nursing care delivery.

The hypotheses were not supported: no differences were found to exist between the two systems of care delivery in terms of patient satisfaction and nurse satisfaction. The lack of differences in the findings could be accounted for by the fact that the units were found not to practice primary nursing according to the definitions of the system. Therefore, further research comparing primary and case systems is recommended.