

COMMUNICATION AMONG CARDIOVASCULAR NURSES THROUGH
THE WRITTEN NURSES' NOTES: A STUDY
IN PATIENT HEALTH EDUCATION

A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF SCIENCE
IN THE GRADUATE SCHOOL OF THE
TEXAS WOMAN'S UNIVERSITY

COLLEGE OF NURSING

BY

JEAN HAMILTON JOUBLANC, B.S.N.

DENTON, TEXAS

December 1977

The Graduate School
Texas Woman's University
Denton, Texas

December 18, 1977

We hereby recommend that the thesis prepared under
our supervision by Jean Hamilton Joubanc
entitled "Communication Among Cardiovascular Nurses
Through the Written Nurses' Notes: A Study in
Patient Health Education"

be accepted as fulfilling this part of the requirements for the Degree of
Master of Science

Committee:

Vera M. Harmon

Chairman

Douglas E. Hopkins

Doyle Ferguson

Accepted:

Phyllis Bridges

Dean of The Graduate School

ACKNOWLEDGMENTS

I would like to express my sincere appreciation to my committee chairman, Mrs. Vera Harmon, for all her time, patience, and assistance given to me in the development of this thesis. Her help and support have been invaluable.

My appreciation is extended to the medical records department and Ms. Peggy Reed at St. Luke's Episcopal Hospital for their cooperation and assistance. Their willingness to help greatly facilitated my collection of data for this paper.

A very special thank you goes to Marjorie Athayde for all of her assistance during our enrollment in the graduate program, and for her participation in this study as an independent observer. A treasured friend and colleague, she has been a source of support throughout this endeavor.

I would like to dedicate this thesis to my husband, Scott, for all of his understanding and patience throughout its development, and to my parents, Dr. and Mrs. F. Hamilton, who first inspired me to enter nurses' training.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	iii
LIST OF TABLES	vi
LIST OF ILLUSTRATIONS	vii
Chapter	
I. INTRODUCTION	1
Statement of the Problem	2
Purposes	3
Background and Significance	3
Definition of Terms	6
Limitations and Delimitations	7
Assumptions	8
Summary	9
II. REVIEW OF THE LITERATURE	10
Introduction	10
Health and Health Education	10
The Nurses' Notes	22
The Nursing Audit	29
Summary	37
III. PROCEDURE FOR COLLECTION AND TREATMENT OF DATA	38
Introduction	38
Setting	38
Target Population	39
Selection of the Sample	39
Tool	40
Methods for Collection of Data	41
Treatment of the Data	41
Summary	42
IV. ANALYSIS OF DATA	43
Introduction	43
Presentation of Findings	43
Summary	54

Chapter	
V. SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS	55
Introduction	55
Summary	55
Conclusions	59
Implications	60
Recommendations	62
APPENDIX	63
CITED REFERENCES	64
SELECTED BIBLIOGRAPHY	68

LIST OF TABLES

Table

1. Incidence of Written Communication Among
Cardiovascular Nurses Through the Nurses'
Notes Regarding Patient Health Education
by Diagnosis 50
2. Incidence of Written Communication Among
Cardiovascular Nurses Through the Nurses'
Notes Regarding Patient Health Education
by Areas of Instruction 52
3. Incidence of Written Communication Among
Cardiovascular Nurses Through the Nurses'
Notes Regarding Patient Health Education
by Number of Patient Hospitalized Days 53
4. Incidence of Written Communication Among
Cardiovascular Nurses Through the Nurses'
Notes Regarding Patient Health Education
by Number of Hospitalizations for
Cardiovascular Problems 53

LIST OF ILLUSTRATIONS

Figure

1. Incidence of Written Communication Among
Cardiovascular Nurses Through the Nurses'
Notes Regarding Patient Health Education
by Cardiovascular Nurses 44
2. Incidence of Written Communication Among
Cardiovascular Nurses Through the Nurses'
Notes Regarding Patient Health Education
by Work Shift of Cardiovascular Nurses 46
3. Incidence of Written Communication Among
Cardiovascular Nurses Through the Nurses'
Notes Regarding Patient Health Education
by Patients Having Undergone Surgery and
Patients Treated Medically. 47
4. Incidence of Written Communication Among
Cardiovascular Nurses Through the Nurses'
Notes Regarding Patient Health Education
by Patients Having Undergone Surgery,
Preoperative and Postoperative 49

CHAPTER I

INTRODUCTION

Since the advent of open-heart surgery, scientific advancement and an increase in knowledge of the cardiovascular diseases, there has been an increased need for patient health education. The cardiovascular nurse is in a unique position in that she has the opportunity to directly assess these health needs. She can then plan, implement, and evaluate nursing actions that meet the needs of the patient, and communicate her results to other cardiovascular nurses who may also be involved with a patient's health education.

Communication is a dynamic process of exchanging information between individuals, as well as a technique for expressing ideas effectively. Communication among cardiovascular nurses is as important in patient teaching as communication between the nurse and the patient. It is of little value to identify and understand patient teaching needs if these needs can not then be translated and communicated into actions aimed at fulfilling them. Communication becomes even more significant when one considers that many nurses come into contact with a patient and are responsible, in part, for that patient's health education.

It is the patient's right to receive information that will enable him to understand his disease process, its imposed limitations and required surgery, when indicated. Due to the relatively short period of time that many patients remain in the hospital, it is important that this teaching be done with the utmost efficiency and effectiveness. It, therefore, follows that there needs to be a coordinated, purposeful and meaningful pattern of patient teaching. Once this pattern has been established, information should be written and documented to allow for follow through of patient health education by other nurses caring for the patient. At present, written nurses' notes are one means of communicating information about the patient and the auditing of these notes is one means of determining what has been communicated. This investigator addressed interactions among cardiovascular nurses by means of written nurses' notes to determine if communication about patient health education was taking place.

Statement of the Problem

Based on relevant literature review and personal observations of this author, it was concluded that cardiovascular nurses did not always communicate what teaching they had done with individual and/or groups of patients. While it was this author's opinion that some degree of

teaching was being done by individual nurses, what specifically had been taught was not always made known to other health team members who came into contact with the patient.

Purpose

The purpose of this study was to determine if communication was occurring among cardiovascular nurses relative to patient health teaching in one large teaching hospital, as measured by the written nurses' notes.

Background and Significance

"Heart disease is one of the major causes of death and morbidity in the United States with coronary heart disease responsible for about 80 per cent of all cardiac deaths" (Hart and Frantz 1977). With the advent of open-heart surgery and technological advancements, many patients who previously would have died from one form of heart disease or another are now being saved. The prevalence of this disease and the increasing numbers of persons undergoing surgery have brought about an increased need for effective health education. The nurse is often one of the first health care personnel the patient and his family come into contact with.

The Standards of Nursing Practice indicate that:

Nursing practice is a direct service, goal directed and adaptable to the needs of the individual, family and

community during health and illness. Professional practitioners of nursing bear primary responsibility and accountability for the nursing care clients/patients receive. (American Nurses' Association 1973)

Cardiovascular nurses in the hospital setting fall into a category of practitioners having the responsibility for meeting the patient's health education needs and for sharing, by written communication, such information among themselves and other members of the health team. While the licensed vocational nurse is not responsible for patient health education, many of these nurses are involved in this activity. A question of concern is by what means are nurses communicating among themselves?

Many means exist for the communication of what health care teaching has been done with a patient. One of the oldest and most familiar means is by way of the written nurses' notes. The nurses' notes are a part of the patient's legal medical record and function to provide valuable information on which the progress of the patient can be judged (Kron 1976). Recently, however, there has been growing dissatisfaction with the nursing notes and the use of the audit of patient records has indicated that:

Records do not always provide the kind of information about the patient that is needed. . . . Charting on nurses' notes has been criticized for a number of reasons Seldom do they indicate the response of the patient to the objectives of nursing intervention. (Kron 1976)

It has been stated that there is an increasing need for health education among patients with cardiovascular diseases. Nursing measures aimed at providing this education need to be documented, as a part of the patient's legal medical record, to allow for more communication regarding a uniform and comprehensive patient health education program.

In a communications study conducted by the University of Texas MD Anderson Hospital and Tumor Institute (1969), it was shown that a communication problem exists in the area of health care. The results of the study indicated:

The press of the nation--newspapers and magazines--have featured an increasing number of reports critical of the quality of American Medical Care One of the most often mentioned complaints about hospitals is the failure to explain the nature of examinations and procedures thereby creating apprehension on the part of the patient and his family.

While this does not directly show that a problem exists in communication among cardiovascular nurses, it does state that a problem exists in the area of health care, of which these nurses are a part.

Communication, as it relates to health care teaching, is seen as a purposive process; and that ideas, when communicated from one person to another, can alter behavior (University of Texas 1969). It was the opinion of this investigator that the subject of communication among cardiovascular nurses, by means of the written nurses'

notes, merited investigation and study in order to assure a consistent and effective patient health education program for those patients with a cardiovascular problem.

Definition of Terms

For the purpose of this paper, the following terms were defined:

1. Cardiovascular nurse--an individual who is presently studying or enrolled in/or has graduated from an approved vocational, associate degree, baccalaureate, or diploma nursing program and is studying to obtain or has obtained licensure or registration, and is currently working on a cardiovascular nursing unit
2. Patient--an individual who is hospitalized with a cardiovascular problem that comes under the care of a cardiovascular nurse
3. Communication--a process by which information is recorded by means of written nurses' notes
4. Nurses' notes--a written record that has as its purpose the communication of a patient's behavior, the care and health education that was given, and the reaction of the patient to that care and instruction (Kron 1976)
5. Health education--information that is concerned with helping individuals and families to prevent, or control, cardiovascular disease and to cope with their experiences

of illness (Travelbee 1971); as measured by a list of critical terminology indicative of health education

6. Critical terminology list--a list of terms which indicate health education to include: teach; instruct; educate; train; inform; explain; demonstrate; advise; discuss; reinforce; review; emphasize; formulate; talk; go over; provide (as in information); and tell

7. Audit--a process by which nurses' notes written by cardiovascular nurses can be examined to determine if communication concerning patient health education is taking place

Limitations and Delimitations

The following were considered limitations and delimitations of this study:

1. There was no way to determine if the nurse had participated in patient teaching, but had not communicated this versus no teaching having taken place

2. Nurses' notes may not truly reflect all aspects of patient health education

3. If nurses' aids were involved in writing on the nurses' notes, their comments concerning patient health education were not considered a part of this study unless they specifically stated the instruction was carried out by a student, licensed vocational, or registered nurse

4. Health education needs vary according to patients' conditions and purpose for hospitalization

5. The target population was a convenience population from which a sample was selected and generalizations or conclusions were made only to that population

6. The written nurses' notes for eleven to seven nursing shift were not considered a part of this study

Assumptions

The following assumptions were basic to this investigation:

1. People can and must be educated to desire, preserve and restore maximum health (Travelbee 1971)

2. Communication is a process which can enable the nurse to establish a human-to-human relationship and thereby fulfill the purpose of nursing

3. The nursing care plan should be part of the permanent record of each patient and should serve as partial documentation of the planning of care for the patient (Kron 1976)

4. Health education is considered a component of a patient's care plan

5. Little or no teaching takes place during the usual sleeping hours of patients

Summary

The intent of this thesis was to determine what written communication was taking place among cardiovascular nurses regarding patient health education. Chapter I contained the rationale, statement of the problem, and purpose of this project, as well as a list of definitions, limitations and delimitations that were inherent to this study. The chapter concluded with a brief summary of significant literature.

Chapter II contains an extensive review of the literature in three major areas of importance to this study. The concept of health and health education is discussed, and is followed by a review of the literature related to the written nurses' notes. The chapter ends with the nursing audit, specifically the retrospective chart review. Communication is emphasized and integrated throughout the literature review. Chapter III includes the procedure for collection and treatment of the data, while Chapter IV concerns itself with the analysis of data that was obtained. The final chapter of this thesis, Chapter V, contains a summary and conclusions, with implications for nursing and recommendations for further study.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

This chapter reviews literature in three major areas. The first area includes the concept of health and health education in our society today. The second area of literature review deals with the written nurses' notes, while the third area concerns itself with the retrospective nursing audit of patient records.

Health and Health Education

If one were to ask what is health or how it is defined, there are many definitions from which to choose. The World Health Organization has defined health as a state of complete physical, social and mental well-being, and not merely the absence of disease. Another concept of the healthy state is one of homeostatic balance involving all of the body's organs, working cooperatively in the human organism. The organism strives for a state of balance by reconciliation of all the demands, both physical and psychic, operating upon and within the organism (Evans 1974). Sanford (1966) describes the "healthy individual" as one who shares the strain of our complex society. The person

changes as he must in order to adapt, but he does not change altogether and the changes made are consistent with what he was before.

In the past, health was viewed exclusively in terms of physical well-being. Primitive man generally believed that illness was a force that attacked and killed individuals. The presence of invisible evil spirits, sin, or wrong doing were thought to be responsible for physical or mental illness. Essentially the victim was helpless, or passive, unless some magical means could be found to undo the wrong or pacify the evil spirits. With the discovery of microorganisms, there came a philosophy of illness and health which was more scientific (Lewis 1974).

Presently, health is regarded as a positive attribute which enables man to take advantage of all his physiological resources, as well as his emotional and psychological potentialities. This new concept of health stems from a desire for physical harmony and homeostasis and includes the dimension of mental, spiritual, emotional, and social well-being (Galli 1976). Today many people enjoy a higher level of health and a greater life span than ever before. This is thought to be primarily the result of the development of new drugs, research, better public health programs, improved medical care, and health education. Historically, health education has been examined in terms

of major areas or topics, for example, disease prevention, alcohol, smoking and so forth. As an applied science, however, it derives its body of knowledge from a variety of disciplines (Galli 1976).

Defining health education is difficult and many authors believe there is no concise answer. It is generally agreed upon though, that it is necessary and important from both a philosophical and practical point of view. The philosophical reasons are concerned with democracy and individual rights, as well as the fact that neglect of health by a person places an unfair burden on the rest of society. Practical reasons have to do with a health-conscious population that is economically more efficient and effective. As medicine and the environment improve so does the pattern of what is referred to as the important diseases. Generally, it is now true to say that the principle health threats in our modern society are more behavioral than bacterial (Evans 1974).

Health education--particularly health instruction--is of greater concern in contemporary society than ever before ("A Unified Approach" 1971). It is rapidly becoming recognized as an essential component of health care (Fylling and Etzwiler 1975). Its purpose is to insure that ignorance, indifference, or superstition on matters concerned with health are kept to a minimum (Evans 1974). The process of

health education is of high order and attempts to change a client's attitude and behavior in relation to health matters, such as nutrition or interpersonal relations (Lee 1972). It is possible to prevent, promote, maintain, and modify a number of health-related behaviors by means of teaching. Closely related to this concept is the view that instruction should help an individual to find meaning in illness, as well as in measures to conserve health and control symptoms of illness (Redman 1976). Many factors have converged in an attempt to bring health teaching into prominence.

In this century, greater effort has been made to maintain health rather than just treating disease. This in turn has enlarged the sphere of knowledge an individual needs and has demanded a change in attitudes about health. Shortened hospitalizations with emphasis on early ambulation require preparation for the convalescence a patient will undergo at home. Another factor influencing the need for health instruction is the increase in long-term illnesses and disabilities (Redman 1976). In spite of the need for health education and our technological advancements, the overall United States death rate ceased to improve during the past quarter-century. While the principal causes of death are heart disease, cancer, stroke, and accident, most authorities now agree that the majority of all deaths could have been prevented or delayed (Somers 1976).

Reflecting these facts and developments, there has been a rebirth of professional interest in health education, as well as a public interest. As a result of this need for health education and a growing consumer interest, the government became involved at the federal level. In 1971, the President's Committee on Health Education was appointed and in 1973 the Health Insurance Benefits Advisory Council to the secretary of Health, Education and Welfare established a committee on health education. Both the National Cancer Institute and the National Heart and Lung Institute are funding consumer education, as well as offering prevention programs. In 1974 public health education was listed as one of the ten national health priorities in the National Health Planning and Resources Development Act of 1974, and in 1976, the private sector National Center for Health Education was established in New York City (Somers 1976). Presently, the Health Education Council is the national body concerned with health education and carries out national, as well as regional, campaigns. It has the responsibility for supporting and advising anyone carrying out health education in addition to training and research functions (Evans 1974). There has not only been a renewed interest in patient health education by the government, but the focus of health instruction is beginning to shift from that of disease orientation to one of direct patient involvement.

Patients continue to indicate that they want more information about health, while at the same time, studies show our population knows much less about health care than they think they know (Fylling and Etzwiler 1975). Many authors believe that patients want instruction and like educational programs organized in their behalf. There is increasing evidence that millions of Americans are seeking additional health information, guidance, and assistance in adopting a healthy life style that is relevant to their individual problems and concerns (Somers 1976; Winslow 1976; Lesparre 1970). Along this same line, there is little doubt that the general public today has developed a far greater awareness of health matters and a far greater expectation of health workers for quality care ("Every Nurse a Teacher" 1974). Resulting from these expectations is the Patients' Bill of Rights which was developed and approved by the American Hospital Association. Essentially the goals of this bill are to provide more effective patient care and greater satisfaction for the patient, his physician and the hospital organization. As well as providing a sort of legal protection for the patient, the Patients' Bill of Rights also includes an element of health education in that it states the patient has the right to current information concerning his diagnosis, treatment, and prognosis in terms he can be reasonably expected to understand (Redman 1976).

Each person is unique and has a right to optimum health. Because health is essentially a personal matter, an individual's experience with it will depend upon his personal and intelligent involvement in daily health practices. Patients from varying social, economic, and cultural backgrounds differ in their attitudes about health and illness, and in their readiness to accept help or health education ("Every Nurse a Teacher" 1974). In 1972, recognition of the patient's need for and right to health education was a theme several authors stressed, and today many health care deliverers are placing great emphasis on patient-family health education where the patient becomes a partner in his own health care and health instruction. In this manner, education can be specific to the needs of the individual and family, allowing for, and taking into consideration, cultural, economic, and social background (Schlesinger 1972). Although health education is generally desired by the public and deemed a necessity of society, health instruction has met with many obstacles which serve to block its effectiveness and even its existence.

One of the major issues, or problems, that interferes with patient health instruction is a lack of an organized, structured, formal educational process. Health instruction is often fragmented, or unplanned, and many times not even documented (Somers 1976). Research shows that structured

teaching, with use of specific written guidelines for content, is more effective than unstructured teaching and that nursing personnel actually prefer a structured educational environment. It is thought to be more consistent, less difficult, less frustrating and less time consuming (Winslow 1976). Accordingly, Lesparre (1970) states that an organized, structured program is one that includes a systematic effort to assess the patient's knowledge about his health, bridges the patient's educational needs and should result in a beneficial change in the patient's behavior. Obviously, very few programs qualify and there is research missing in this area in the form of evaluative tools, as well as measurement of the quality of instruction rendered the patient and/or his family.

Another issue facing health education is that of financial burden. The exact amount of money that is needed to start, or operate, a good educational program varies from institution to institution and will depend upon its size, state or regional affiliation and available funding. While some funding is available on a governmental and private basis, another source, that of third party reimbursement, is becoming increasingly available (Redman 1976; Somers 1976). In addition to third party payers, patient education has been funded from patient tuition fees, grants, and in general, left over funds in the health care

institution. Clearly, one long range goal for patient health education is cost containment (Redman 1976).

Another major problem in patient health education is that of the medical model versus the educational model. Nursing education in the past has been primarily focused on disease and curative aspects of care, thereby neglecting the family, the person at risk, or the well individual ("Every Nurse" 1974). This disease model has been found to be too limited in perspective and the addition of the educational model in health is seen as imperative. The educational model does not focus entirely on teaching the patient to gain insight into the causes of his behavior or diseases, but on modification of patient behavior as well. It has become particularly useful in the areas of mental disorders, rehabilitation and mental retardation. Nursing is evolving into an independent profession concerned with individuals and groups in the full range of the health-illness continuum. As it does so, it must include a number of models that focus on human development, one of which is the educational model (Redman 1976).

Physician opposition is seen as still another obstacle in patient health education. This opposition actually stems from two sources, one of which is constraints related to the medical model. Traditionally, patient health education has not been the responsibility of hospital nurses

and many physicians have difficulty in relinquishing some of this responsibility to nurses (Schlesinger 1973). Another source of opposition is that physicians are often slow to accept the intervention of non-physicians as collaborators in the care of patients. The acceptance of patient health education is an integral part of patient care and must be accepted in medical schools and schools of nursing (Lesparre 1970). While many physicians may be directly opposed to nurses functioning in the capacity of patient health educator, there are those that do support this role and view patient education as the responsibility of every member of the professional health team (Winslow 1976).

The role of nursing in patient health education is not as new, however, as many might suspect. Early English leaders in nursing in the middle and late nineteenth century recognized the importance of patient and family teaching. Since much of the care of sick individuals was done by the family, the efforts of nurses to teach represented a way of extending their services. No doubt this motivation was present in visiting nurses in the United States who fought against disease and poverty among immigrants (Redman 1976). Today, teaching of patients and families is not viewed as a luxury, but in actuality is the responsibility of every nurse. The American Nurses' Association statements of Functions, Standards, and Qualifications include teaching

as a function of nurses, as do the 1973 Standards of Practice. The National League of Nursing has long been concerned with health teaching and the preparation of nurses to carry out these tasks. The curriculum guide of 1937 stated the nurse is a teacher and an agent of health in whatever field she may be working. Most nursing leaders today have extended this to include not only teaching in nursing, but an increasing interest in knowledge of the scientific bases of the teaching-learning process (Redman 1976). Teaching patients and families is complex and challenging and it involves the investment of time and energy. The helping of people to recognize their health needs and understand ways of meeting them is an essential responsibility of every nurse in whatever setting she works ("Every Nurse" 1974).

What nurses view as their responsibility and what is actually being carried out may be two different things. Winslow (1976) noted that, in one study where 1500 nurses were questioned, the majority believed that teaching is the responsibility of nursing and is as important as other aspects of their work. An interesting note, however, was that the majority of these nurses stated they themselves were not personally teaching patients. It has been suggested that one reason nurses are not more involved in the teaching role is that they do not really feel qualified in

this position (Redman 1976; Winslow 1976; Kucha 1974). In various studies, nurses pointed out factors that they felt interfered with patient teaching to include: (1) lack of knowledge and inadequate preparation to teach, to include not enough background to apply learning-teaching principles, identifying readiness or lack of readiness to learn, and evaluation of instruction given; (2) lack of time with too heavy a work load; (3) lack of nursing service support; (4) physician opposition to patient teaching as an independent and professional function of the nurse; (5) the belief that sharing of information with the patient decreased the nurses' power or authority; and (6) poor communication between members of the health team regarding patient health education (Winslow 1976).

The importance of communication appears to be significant. Redman (1976) states that teaching is a special form of communication and encompasses what is known about a subject. Teaching has been seen as communication especially structured and sequenced to produce learning. Health instruction must be on a continuing basis and not a crash program. It must be communicated and planned with a definite purpose in mind ("A Unified Approach" 1971). Kucha (1974) states that the quality of interdepartmental communication and coordination directly affects patient health education. Along this same line, Winslow (1976) believes

that nurses may not communicate well with one another. She believes that patient teaching should be assigned and recorded in the plan of care and nurses' notes to enable continuity, and to avoid leaving patient teaching undone because everyone thought someone else was giving instruction to the patient. Written, planned communication enables other members of the health team to determine what instruction the patient has received. While it does not necessarily indicate the quality of instruction, it does give guidelines to other members involved with the patient's health education and hopefully allows for more continuity in the instruction given to the patient and/or his family. The written nurses' notes, as part of the patient's medical record, provide a means of written, documented communication among health care deliverers.

The Nurses' Notes

The medical record has long been recognized as an important source of written information as it serves to provide a permanent record of the total care given to the patient. It receives input from all members of the health team who are involved directly or indirectly with a patient's care, and functions to insure continuity of care by transmission of information from one team member to another (McNabb 1971). The medical record is composed of

many sections and the nurses' notes comprise a large part of this written record. The nurses' notes function not only to provide information about the patient to other health team members, but serve as a communications system among the nurses themselves to include all working shifts. Kelly (1971) feels that the nurse is most likely to be the key person in the communication chain as she is the only member of the health team in a position to observe the patient frequently, implement doctor's orders, plan patient care, and coordinate all the health services required by the patient. She further states that nurses are notoriously lacking in written communication skills and without precise information from the nurse, patient care suffers. In reality, efficient communication depends upon conveying the maximum amount of information as concisely as possible (Prendergast 1977); and nurses have the means to accomplish this by way of the written nurses' notes.

Essentially, nurses' notes are written nursing observations which serve many purposes. Other than serving as a communications system among health team members, nurses' notes function to record a history of the patient's care and therapeutic interactions, and to document patient care for administrative and legal purposes. In order to be an effective communication tool, nurses' notes must reflect thoughtful and intelligent observations (Cates 1972;

Hershey 1969). Many times these written notes hold the only clue as to whether doctor's orders were carried out and what the results were. The notes are written in strict chronological order showing both time and date, and usually offer the most detailed information regarding the patient (Kerr 1975). In addition to the practical considerations of nurses' notes, Christopoulos (1970) states that the psychological framework of nurses' charting is made up primarily of three areas of human interaction. These areas include the physician-patient relationship, nursing staff-patient relationship, and physician-nurse relationship. Both the practical and psychological components become important when one considers the legal aspects of the written nurses' notes.

Since nurses' notes serve as an effective means of communication for persons engaged in patient care and function to establish a reliable record of the therapeutic measures taken on behalf of patients, they are often used extensively in court cases of litigation (Hershey 1969). An attorney for the plaintiff can take advantage of defects in records and develop unfavorable inferences toward the defendants. A trial is actually a reconstruction of past events and the defendants are often relying on the chart and other records as evidence to refresh their memories of what may have occurred as many as two or more years ago.

Inadequate, or misleading, documents may seriously inhibit the successful defense of a legal action (Hershey and Lawrence 1976).

Documentation in health care and of medical services rendered to patients is a contractual obligation between the health agency and Social Security Administration. Services given must be in accordance with interpretations of the Medicare law and must be recorded in a manner that reflects the skilled care being given. Nurses are responsible in several ways for documenting health care they give to include: (1) a responsibility to the patient to keep accurate up-to-date records of services and teaching rendered, and progress observed so that care will be consistent with the patient's health needs; (2) there is a responsibility to the payment body to provide proof that such care was given; and (3) there are legal responsibilities to provide a record reflecting care given (Thoma and Pittman 1972). In spite of the legal ramifications and necessity for accurate documentation of patient care, nurses' notes have often been criticized and problems cited.

One problem facing written communication is that nurses feel it is easier and takes less time to verbally communicate with one another, or the doctor, concerning patient care and health instruction. Actually, the purpose of such a report would be to communicate brief factual

information which the recipient would make use of in her official capacity. The written report, on the other hand, functions to insure continuity of patient care, prevent errors by making available a source of reference for the nurses, and provide a record of the care given to the patient. Obviously, verbal information would not meet the above requirements (Fitzharris 1972; Kelly 1971).

One reason cited in the literature that nurses are inclined to give more verbal reports than detailed nurses' notes is the problem of time. It takes time to organize one's thoughts and to give a clear, logical sequence of planned patient care (Kelly 1971). Too often there is insufficient time for both delivery and documentation of care so the nurse, establishing priorities, skimps on the charting (Thoma and Pittman 1972).

Another problem that critics have cited with nurses' notes is that they contain "basket" words or phrases, for example, "a good day," "slept well," or "complaining of pain--medication nurse notified." These phrases convey little to the reader concerning the patient's condition or progress (Kerr 1975; Howard and Jessop 1973). Still another problem is that nurses' notes are "after the act" and source-oriented records show nurses' notes to be written when and after events occur. This results in a sequential listing of happenings rather than a well organized record that

indicates planning of patient care and health instruction, as well as results and patient responses (Prendergast 1977; Thoma and Pittman 1972).

Some authorities believe that part of the problem with nurses' notes exists because of the form itself and that it is inadequate to meet the charting needs. While there have been many variations of nurses' notes, to include check off lists, teaching models and measures developed to simplify charting and decrease time necessary to chart, the problem-oriented record appears to be one of the better organized systems.

This system was first developed by Lawrence Weed, M.D., Professor of Medicine at the University of Vermont Medical Center in 1962. Weed's problem-oriented system evolved from his perceptions that the medical record is usually a tangle of illogically assembled lists of information. Charting does not reflect identification of patient problems, but rather who did what and when (Prendergast 1977; Woody and Mallison 1973). Weed also felt that once identified, patient problems provide a structural framework for the planning and delivery of care. The general objectives to be achieved through this system of patient care recording are as follows: (1) to provide more clear and accurate documentation with defined accountability; (2) to allow for a more effective audit; (3) to stimulate an atmosphere

wherein questioning is a positive encounter for all members of a health team; (4) to compliment and reinforce primary care assignments; (5) to promote the computerized development of a medical record through a scientifically oriented system; and (6) to better correlate subjective and objective information, assessments, plans and patient teaching for the evaluation of quality of care rendered (Prendergast 1977). While it is not the purpose of this study to analyze the problem-oriented system, it is worth mentioning in that it is often the form of charting done by nurses in many institutions and serves as a form of nurses' notes by way of written documentation, to include recording of patient/family health instruction.

One last problem with the nurses' notes, mentioned in the literature, is that many nurses do not believe anyone ever reviews what they write on charts and, therefore, are not as concerned about charting as they should be. Kerr (1972), however, identifies two types of chart review. These include reviews done outside the hospital when persons investigate for insurance companies or when attorneys are preparing for litigation, and reviews done in the hospital by nurse audit committees, medical records departments, and accreditation committees. This would indicate that nurses do need a comprehensive information and written communication system (Kelly 1971). This is becoming more

evident every day with the increasing complexity of patient care and health instruction required by society. Accurate, organized documentation is the responsibility of every nurse and the nursing audit, along with other hospital committees, functions to insure that this documentation is present and includes patient care and health instruction needs.

The Nursing Audit

The nursing audit is one means for evaluating nursing care and while there are a number of other methods such as patient questionnaires, check lists, interviews, or observation, one method in itself cannot provide all the answers. The nursing audit, however, is often considered the more useful in evaluating and improving care that the patient receives (Morgan 1974; Berg 1974).

The nursing audit evolved as a result of a public and professional demand for quality assurance in health care. When used in this context, quality assurance commonly refers to the accountability of health personnel for the quality of care they provide. Accountability involves provision of evidence of the level of care provided as compared to an agreed-upon standard. This quality control bandwagon, according to Phaneuf and Wandelt (1974), is speeding along because of the mounting cost of care and the threat of controls exercised by other than the providers of care.

In 1972 the United States Congress amended the Social Security Act and mandated the establishment of Professional Standards Review Organizations. The purpose of these organizations was to review the quality and cost of care paid by Medicare, Medicaid, and Maternal Child Health programs. The American Hospital Association's Quality Assurance Program was developed and is an example of voluntary movement toward quality controls. The program includes criteria development, description of practice, judgment or evaluations, and has provisions for corrective action, as well as reassessment (Diddie 1976; Phaneuf and Wandelt 1974). The focus of such programs has been quality control as viewed from a medical standpoint of diagnosis and not from an emphasis of health care. In contrast, The Joint Commission for the Accreditation of Hospitals developed a quality assurance program in the form of a retrospective patient care audit procedure which requires establishment of patient care criteria by nurses. This system focuses on alteration in the health status of patients. Outcome criteria are formulated in terms of the expected discharge status of the patient. Included in this program are nursing admission assessments and essential management elements for each patient. This program was viewed by many health authorities as a major step in involving nursing in the evaluation of

patient care, and acknowledges that health care delivery is a shared responsibility (Eddy and Westbrook 1975).

As nurses become more involved in quality assurance programs, the nursing audit takes on more significance and importance. The literature cites many methods and approaches to the nursing audit, all of which have as their common goal the improvement of patient care. For the purpose of this study, only the method of retrospective chart review will be discussed.

According to Phaneuf (1976) the retrospective nursing audit of patient records is a method for evaluation of care through the appraisal of the nursing process. Evaluation is viewed as a part of professional accountability and the audit is one way through which nurses can help to satisfy the accountability that is inherent in professional practice. This entails a rigorous assessment of the nursing process that is actually used in patient care. The nursing process encompasses all major steps taken in the care of the patient to include the nature, purpose, and rationale, as well as the degree to which they assist the patient reach specific and attainable therapeutic and health goals. There are seven functions of professional nursing which provide the foundation for the nursing process and encompass the essential character of nursing. These functions include:

- (1) application and execution of physician's legal orders;

(2) observations of symptoms and reactions; (3) supervision of the patient; (4) supervision of those participating in care (except physicians); (5) reporting and recording; (6) application and execution of nursing procedures and techniques; and (7) promotion of physical and emotional health by direction and teaching.

In many instances the literature indicated that while many institutions set up their nursing audit based on the seven functions of nursing process as identified by Phaneuf, other health care delivery systems developed their own criteria for nursing audit. Regardless of the criteria established, the retrospective nursing audit of patient records appears to be structured in a similar fashion. The rationale for use of the patient's chart as a source of information is based on the fact that it is a service instrument, essential to the safety of the patient and the management of his care. It further serves as the major means of communication between health team members and provides legal documentation of the care provided. The patient care record is available and assessible to the process of auditing (Phaneuf 1976; Donovan 1971).

Prior to the actual carrying out of a nursing audit, the director of nursing must first present the rationale for and actually sell the idea of an audit to supervisory and administrative staff. Emphasis should be placed on the

principle that nursing assessment of the quality of care in all settings where nursing care is given is a nursing responsibility and that the nursing audit is one means of carrying this out (Morgan 1974). Once the need for an audit has been identified and the literature reviewed, the nursing administrator then appoints an audit committee. The committee should be composed of nurses with varied expertise and be representative of administrative nurses, supervisors, head nurses, staff nurses, and inservice directors (Diddie 1976; Rubin et al. 1975; Morgan 1974). The length of membership on the audit committee, according to the literature, varies and may extend from a few months to a year or more. Since committee members must first be educated to the specific audit procedures and develop expertise in this capacity, it is not feasible to encourage short term membership of less than one year.

Once the committee has been established, the audit procedure must be defined and developed. Watson and Mayers (1976) list the basic elements of retrospective chart review to be: (1) identification of specific criteria, that is medical or nursing diagnostic categories developed and written by an agency's own staff; (2) systematic care review process or the auditing of closed charts; (3) analysis of audited data; (4) remedial action programs designed to remove deficits; and (5) reevaluation in the form of

periodic evaluation of nursing performance and patient response. Hanna (1976) adds to the above elements by indicating the need for the development of expected compliance (performance) levels in the form of an audit tool which can be assigned a value. The Joint Commission on Accreditation of Hospitals includes all of the above elements in their quality assurance programs (Diddie 1976). Phaneuf and Wandelt (1974) describe the nursing audit as a fifty item instrument designed to measure the quality of the care received by a patient. The items identify components of the seven functions of nursing and the audit of patient records is done after the patient has been discharged from the hospital. The audit is considered an ongoing process and is conducted by a committee composed of nurses from the staff of the agency, having a membership of approximately one year. Following the collection and analysis of data, programs can be formed which will narrow gaps identified between the profile derived from audit measurements and the profile prescribed as the desired level of excellence. The audit is structured such that reevaluation of programs and re-audit is a part of the overall nursing audit procedure.

While many individuals feel the nursing audit is a means of determining the quality of care a patient receives, this belief is not shared by many nursing authorities and the literature cites many disadvantages, as well as

advantages, of the retrospective chart review. Phaneuf (1976) states that the use of the chart as a source of information is criticized on the grounds that it is the recording and not the care that is evaluated. She further states, however, that experience with the audit strongly suggests that good recording is likely to be associated with good care. This is based on the assumption that conditions which bring about good care are also responsible for bringing about good recording. Still, others feel that the chart audits give a very limited picture of care that the patient does receive and that other means of judging patient care should be developed (Holle 1976; Corn and Magill 1974). Subjectivity of evaluation has been cited as a major hindrance in efforts to audit and is related partially to the difficulty in establishing objective, measurable, criteria in the form of an audit tool (Eddy and Westbrook 1975).

Other disadvantages cited by the literature are that results of the nursing audit are dependent on future audits, as corrective programs need to be implemented and subject to reevaluation at a later date. Professional staff are required to assess charts which is time consuming and assessment methods have an interpretation range which decrease objectivity of evaluation. Still another limitation of the nursing audit is that it takes time to adequately educate the committee members to be able to perform their

function. Staff problems may also arise if nursing service has not taken the necessary steps to educate them to the purpose and benefit of the audit, and indeed, obtained the support of the nursing staff itself (Trout 1974). The nursing audit is not designed for the evaluation of care while it is being given, but provides a retrospective view and it is not designed for evaluation of nurse performance, but rather a nursing care audit only. It is not an error-detecting scheme, nor is improvement of patient care recording a primary objective, although it is expected that it would improve with good auditing (Phaneuf 1976; Morgan 1974).

Although the nursing audit has its disadvantages and limitations, it also has its positive aspects. Major advantages cited by the literature are that the nursing audit enhances communication within the nursing department and is educationally useful in staff development. It permits in-depth assessment of problems previously defined and serves as an excellent focus for discussion of nursing philosophy and beliefs. Another advantage is that professionals do the entire assessment (Trout 1974). Finally, nursing audit tools serve to remind nurses of the many components of comprehensive nursing care and prompt movement toward improved nursing care practice among the nursing staff (Phaneuf and Wandelt 1974).

Nursing audit may not provide all the answers, but it is one means of enabling nurses to look at what they are doing, and for sure what it is they have recorded regarding their patient's care and health education. The nursing audit is one way of enhancing communication among nurses and hopefully this will lead to a more consistent pattern of patient health education.

Summary

This chapter contained a review of literature which indicated that as our society advances in scientific technology, patient health education needs are increasing. The individual is becoming more aware of his health status and is demanding quality care and education by health care professionals. Communication among health team members, by way of written documentation, is a major means by which patients can expect a more consistent, effective pattern of health care and education. The nursing audit, which has evolved as a result of the demand for quality care, is valuable in determining what has been written concerning patient health teaching. It is hoped that the retrospective auditing of patient records will lead to the improvement of patient care.

Chapter III contains the methodology used in determining what communication has taken place among cardiovascular nurses regarding patient health education.

CHAPTER III

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

Introduction

This is a retrospective descriptive study in which nurses' notes written by cardiovascular nurses were audited to determine if communication relative to patient health education was taking place. Patient records were reviewed to determine the number of times patient health education was recorded by student, licensed vocational and registered nurses, in relation to the number of days the patient was hospitalized. The sample was randomly selected from a convenience population of patients discharged from the cardiovascular service during the month of June 1977. Chapter III explains the setting, population and means for sample selection. It includes a description of the tool that was used, and discusses the methods for collection of data, as well as the treatment of the data. This chapter is concluded with a summary.

Setting

St. Luke's Episcopal Hospital located in Houston, Texas, was the setting for this study. The hospital has a

large cardiovascular population from which a sample was selected. There are 754 adult hospital beds and the average number of patients discharged from the cardiology service per month is estimated to be 320.

Target Population

The target population was identified as all the patients of five cardiologists and cardiovascular surgeons with a cardiovascular diagnosis who were cared for by cardiovascular nurses and were discharged from the cardiovascular service during the month of June 1977. It was estimated that these five physicians' patients comprised 90 percent of the total number of patients on the cardiology service. Each physician gave written permission for the medical records of his patients to be audited for the purpose of this study. The population was not limited to the geographic location of the selected hospital as patients from all over the United States and the world are seen by this service.

Selection of the Sample

The sample of patients with cardiovascular problems was selected from the target population through the utilization of a random numbers table. Every medical record of a patient discharged from the cardiovascular service of these five physicians, during the month of June 1977, was

randomly assigned a number starting with the number one. The table of random numbers was used to select 20 percent of the total number of medical records which constituted the sample of patients to be audited. The nurses' notes were reviewed for every day the patients were hospitalized. Those patients having a cardiovascular diagnosis and who were admitted to the cardiovascular service but not to a cardiovascular nursing unit and were not cared for by cardiovascular nurses were not considered a part of this sample.

Tool

The tool consisted of a list of critical terminology developed by the investigator which indicated health teaching (see Appendix). The terms include: (1) teach; (2) instruct; (3) educate; (4) train; (5) inform; (6) explain; (7) demonstrate; (8) advise; (9) discuss; (10) reinforce; (11) review; (12) emphasize; (13) formulate; (14) talk; (15) go over; (16) provide (as in information); and (17) tell. The list was submitted to a panel of nurse educators for content validity and had 100 percent agreement prior to its use. The list of critical terminology was used by an independent observer and the investigator to determine whether recorded statements were indicative of health instruction.

Methods for Collection of Data

After receiving permission from the selected hospital, the auditing of the patient's record, specifically the nurses' notes, allowed the investigator to determine if communication had taken place in regard to patient health education. This was accomplished by directly noting the number and content of entries that specifically designated that patient health instruction was conducted.

A peer of the investigator was chosen as an independent observer. Both the independent observer and investigator identified statements which indicated health instruction using the list of critical terminology, as well as selecting other statements which they believed reflected health teaching. The results were correlated and interrater reliability of exact agreement was found to be 97 percent.

Patient anonymity was accomplished by numbering the patient records starting with the number one in the order in which the patient was randomly selected. Those nurses writing on the chart also remained anonymous and only their present status was noted, that is, whether they were student nurses, licensed vocational or registered nurses.

Treatment of the Data

The data that was collected was statistically analyzed by use of descriptive statistics for nominal data. Percentages and frequency counts, regarding recorded

incidences of patient health instruction by cardiovascular nurses, were analyzed and represented by a graph. This investigator looked at recorded health instruction in terms of preoperative and postoperative education, medical or surgical diagnosis, and frequency of written communication for various working shifts. This information was also represented by figures, specifically the bar graph.

Frequency and percentage of recorded patient health education, by cardiovascular nurses, were tabulated in relationship to specific patient diagnosis, area of instruction, and number of patient hospitalized days, as well as number of times hospitalized.

Summary

A sample of patients with cardiovascular problems was randomly selected and the nurses' notes of their medical records were audited by means of a retrospective chart review. Data were obtained, with the assistance of an independent observer and the critical terminology list, concerning what communication had taken place among cardiovascular nurses regarding patient health education. Chapter IV presents the analysis of the data that was collected.

CHAPTER IV

ANALYSIS OF DATA

Introduction

This descriptive study was conducted to determine what written information about health instruction was being communicated among cardiovascular nurses. Ninety-two patients, or 20 percent of the 460 patients who were discharged during the month of June 1977, had their medical records audited. The data collected from the auditing of nurses' notes were subjected to statistical analysis. Chapter IV presents the results and interpretations of the findings, as well as an interpretation of the statistics chosen for use in this study.

Presentation of Findings

The total number of recorded incidences of health instruction for ninety-two patients was sixty-five. The bar diagram in figure 1 indicates the frequency and percentage of recorded health instruction by registered, licensed vocational, and student nurses. Where N represents the total number of frequencies of these recorded statements, it can be noted that registered nurses recorded 60 percent of all communications in reference to patient health

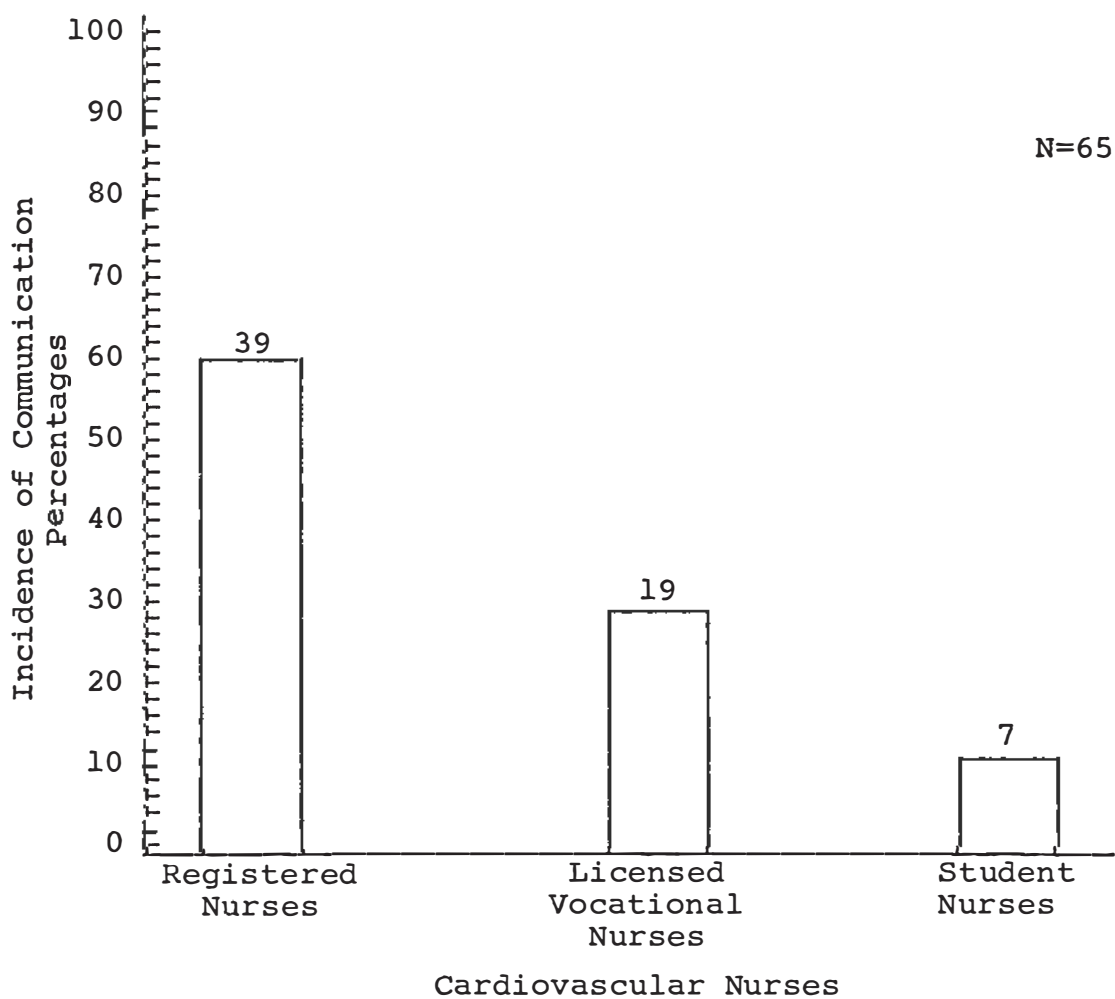


Fig. 1. Incidence of written communication among cardiovascular nurses through the nurses' notes regarding patient health education by cardiovascular nurses

education. Licensed vocational nurses were responsible for the next highest written incidences, followed by student nurses. It was interesting to note that of the students participating in recording of health instruction, four were from registered nurse programs and three were practical student nurses from licensed vocational nursing programs. Throughout the review of the nurses' notes, it was noted that there were very few entries made by students. One reason for the low percentage by students may be that the number of schools utilizing the hospital's cardiovascular units for clinical experience may decrease during the summer, or month of June.

Incidence of documented health instruction was also looked at in terms of work shifts of cardiovascular nurses, and is represented by figure 2. The bar graph indicates frequency and percentage of written health education for day shift as compared to the evening shift. There was a substantially higher percentage of documented health instruction between the hours of seven o'clock in the morning and three o'clock in the afternoon than between the hours of three o'clock in the afternoon and eleven o'clock in the evening.

Figure 3 represents the percentage of recorded health education for patients who were treated on a medical basis versus those having undergone surgery. Out of the

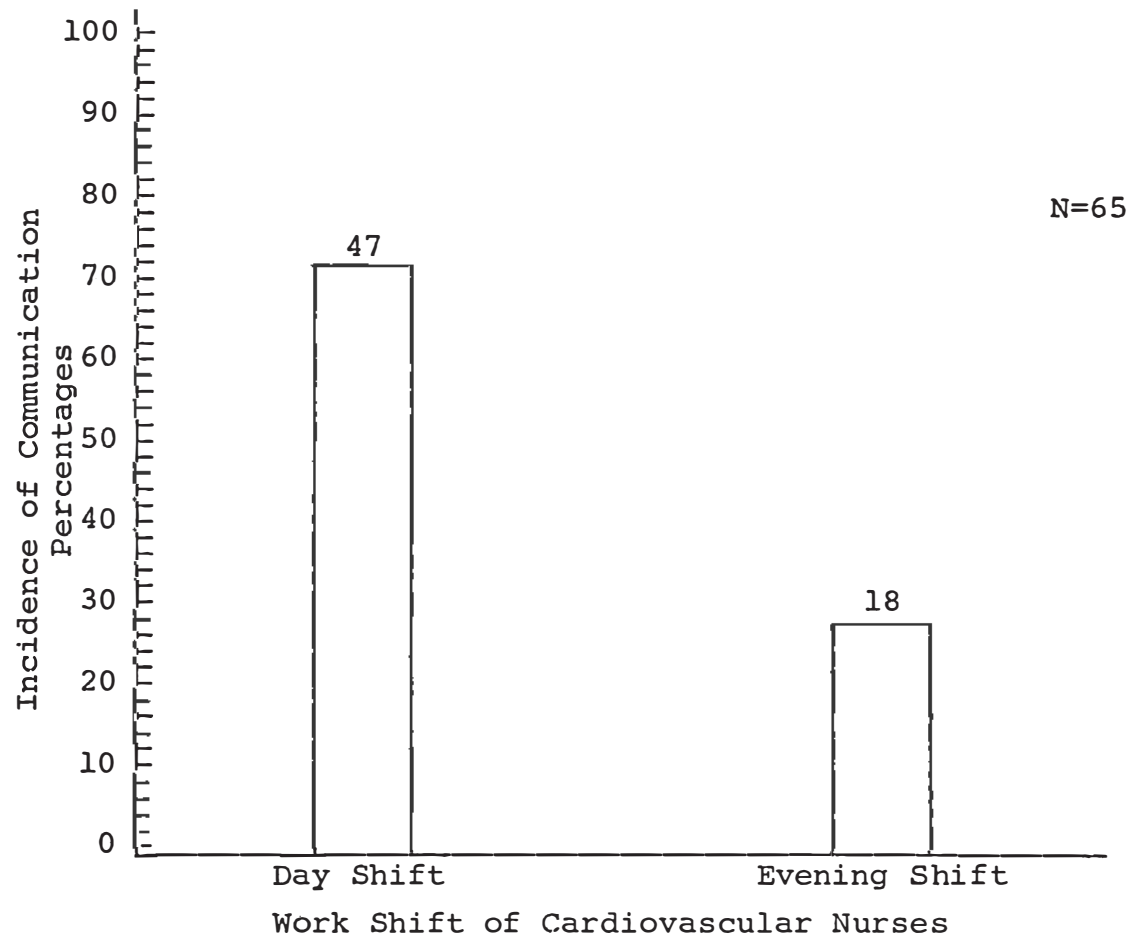


Fig. 2. Incidence of written communication among cardiovascular nurses through the nurses' notes regarding patient health education by work shift of cardiovascular nurses

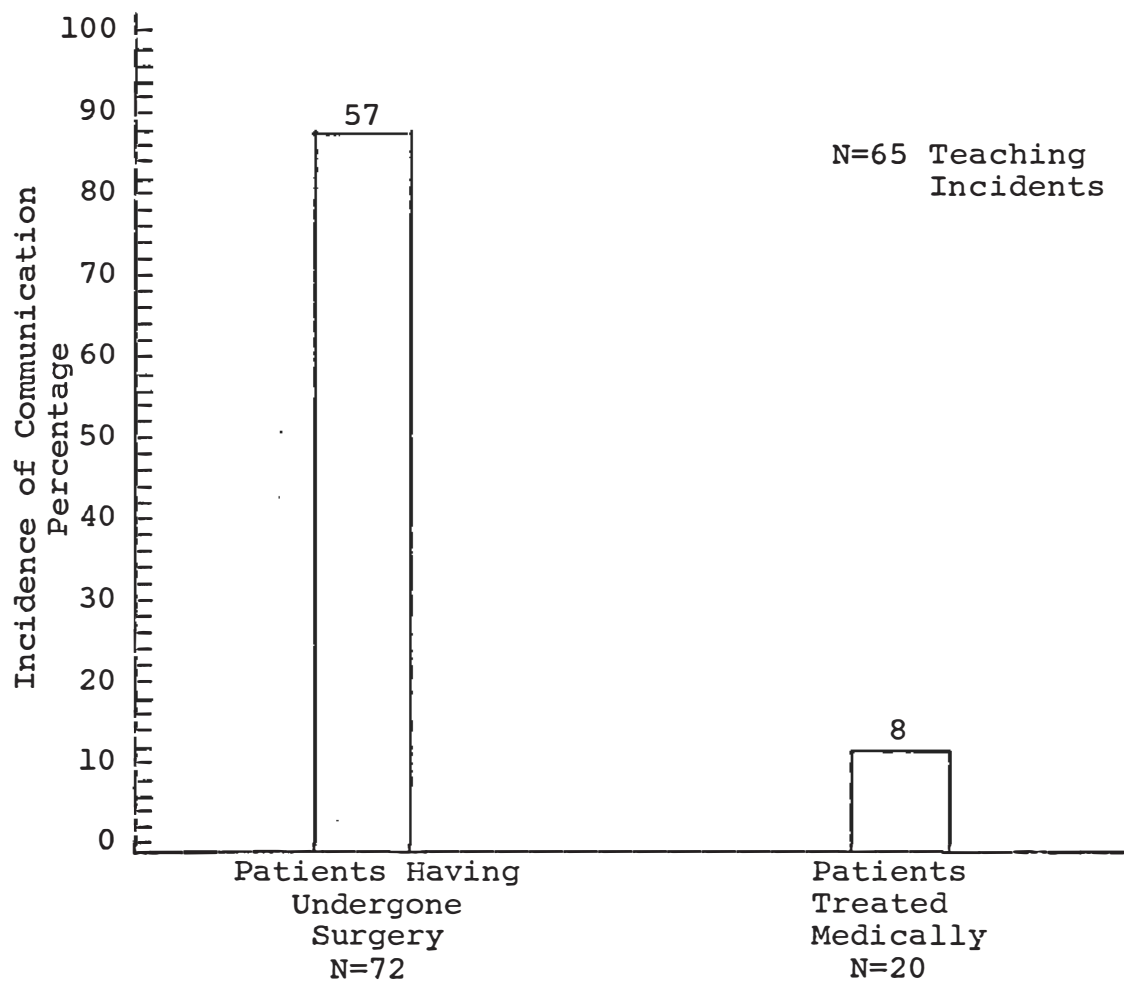


Fig. 3. Incidence of written communication among cardiovascular nurses through the nurses' notes regarding patient health education by patients having undergone surgery and patients treated medically

ninety-two medical charts reviewed, 22 percent of the patients were treated on a medical basis while 78 percent had surgery of some type. The percentage of documented health instruction for surgical patients was substantially higher than that of patients medically treated. Realizing that the random sample contained a significantly higher number of surgical patients than medical ones, the data can be viewed from a different standpoint. If $N=20$ represents the total number of medical patients and 8 the number of recorded incidences of health instruction, then 40 percent of the patients treated medically had documented evidence of health instruction by cardiovascular nurses. Of the seventy-two patients who underwent surgery, 79 percent had written documentation in the nurses' notes of health instruction.

Data collected concerning surgical patients were further classified according to percentage of preoperative and postoperative written frequency of instruction. Figure 4 represents the obtained results where $N=57$ indicates the total number of recorded statements reflecting health instruction of patients having had surgery. The bar graph shows that a higher percentage of health instruction was communicated for patients preoperatively than was postoperatively.

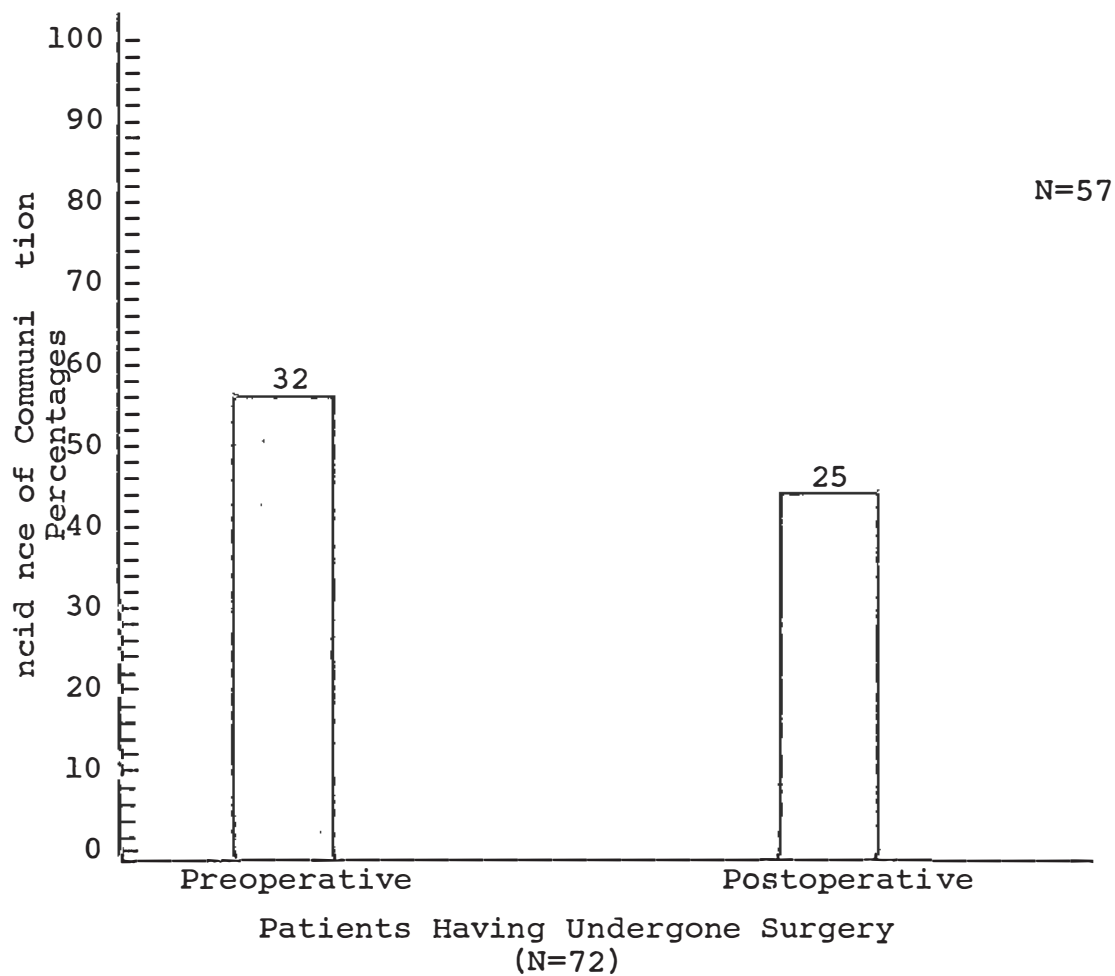


Fig. 4. Incidence of written communication among cardiovascular nurses through the nurses' notes regarding patient health education by patients having undergone surgery, preoperative and postoperative

Patients presented with many diagnoses in the sample of medical records audited. Table 1 lists all of the cardiovascular conditions where nurses documented that health instruction was given. It was of interest to determine if percentages of recorded instruction were higher for one patient diagnosis or condition than for another. The diagnoses are listed according to proportion. Patients diagnosed with coronary artery disease had the highest percentage of statements reflecting health instruction recorded in the nurses' notes.

TABLE 1

INCIDENCE OF WRITTEN COMMUNICATION AMONG CARDIOVASCULAR
NURSES THROUGH THE NURSES' NOTES REGARDING
PATIENT HEALTH EDUCATION BY DIAGNOSIS

Diagnosis	Incidence of Recorded Health Education N=65	Percent
Coronary Artery Disease and/or Progressive Angina	36	55
Valvular	9	14
Peripheral Vascular Disease	7	10
Congenital Heart Disease	6	9
Chest Pain Etiology Unknown	2	3
Coronary Artery Spasm	2	3
Abdominal Aortic Aneurysm	1	2
Marfan's Syndrome	1	2
Heart Block	1	2

The areas of instruction recorded varied widely and table 2 indicates the major categories of health education. The category "NPO" includes health instruction in this area regardless of whether the patient was placed on this status prior to surgery or in preparation for a test or procedure. The category "Pre-op Instruction" is included because 8 percent of the total incidences of written communications stated this category in this manner. While the investigator does not know specifically what "Pre-op Instruction" included, it is a significant percentage in comparison with other areas of recorded health education. The last category entitled "Postoperative Instruction" groups together any health instruction that occurred postoperatively and does not fall into any of the above categories listed in the table. The area includes statements regarding comfort measures, use of antiembolic stockings, correct body alignment, and movement in bed for prevention of circulatory stasis. As depicted by table 2, the category "Postoperative Instruction" represented 23 percent, the highest percentage of statements reflecting health education written by cardiovascular nurses.

The incidence of written communication was looked at in relation to the number of days patients were hospitalized to determine if patients hospitalized for longer periods of time received more health instruction documented

TABLE 2

INCIDENCE OF WRITTEN COMMUNICATION AMONG CARDIOVASCULAR
NURSES THROUGH THE NURSES' NOTES REGARDING
PATIENT HEALTH EDUCATION BY AREAS
OF INSTRUCTION

Area of Instruction	Incidence of Recorded Health Education N=65	Percent
NPO (nothing by mouth)	6	9
Medications	11	17
Tests and Diagnostic Procedures	11	17
Surgery or Diagnosis	3	5
Diet	2	3
"Pre-Op Instruction"	5	8
Turn, Cough, and Deep Breathe	8	12
Spirometer	4	6
Postoperative Instruction	15	23

in the nurses' notes. Table 3 represents these results and indicates the highest percentage of recorded statements occurred for patients hospitalized from nine to twelve days.

Table 4 lists the number of times patients had been hospitalized for cardiovascular problems and shows incidence of recorded communication in relationship to hospitalizations. Patients hospitalized two times had 45 percent, the highest percentage, of written documentation by cardiovascular nurses. The last category of table 4 was listed

TABLE 3

INCIDENCE OF WRITTEN COMMUNICATION AMONG CARDIOVASCULAR
NURSES THROUGH THE NURSES' NOTES REGARDING
PATIENT HEALTH EDUCATION BY NUMBER OF
PATIENT HOSPITALIZED DAYS

Number of Patient Hospitalized Days	Incidence of Recorded Health Education N=65	Percent
1-4 Days	15	23
5-8 Days	4	6
9-12 Days	31	48
13-16 Days	13	20
Greater than 16 Days	2	3

TABLE 4

INCIDENCE OF WRITTEN COMMUNICATION AMONG CARDIOVASCULAR
NURSES THROUGH THE NURSES' NOTES REGARDING PATIENT
HEALTH EDUCATION BY NUMBER OF HOSPITALIZATIONS
FOR CARDIOVASCULAR PROBLEMS

Number of Hospitalizations for Cardiovascular Problems	Incidence of Recorded Health Education N=65	Percent
1	6	9
2	29	45
3	20	31
4	4	6
5	4	6
Unable to Determine	2	3

as "Unable to Determine" and represents those medical records where it was impossible to determine how many times the patient had been hospitalized for a cardiovascular problem.

Summary

The analysis of the data included a discussion of information obtained from the auditing of the nurses' notes for evidence of written documentation regarding patient health instruction. The results were represented by figures, specifically bar graphs, and tables, using statistics for nominal data to include frequency counts and percentages. Chapter V contains conclusions, implications, and recommendations for further study from the data that was analyzed.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

This study was conducted to determine if cardiovascular nurses were communicating what health instruction they had given to patients through the written nurses' notes. A summary of this study will follow and conclusions from the obtained data will be stated. This chapter will conclude with implications for nursing and a list of recommendations for future research.

Summary

The purpose of this study was to determine if cardiovascular nurses were communicating with one another through the written nurses' notes regarding health instruction given to patients. A review of the literature indicated that heart disease is one of the leading causes of death and morbidity in the United States. The prevalence of this disease and increasing numbers of persons undergoing surgery have brought about an increased need for effective health education. Health education needs are increasing in our advanced society of today.

The consumer is becoming more aware of his health status while at the same time demanding quality care and health instruction by health care professionals. Nurses are often the first health care personnel that patients come into contact with and they share the responsibility for patient health instruction. Nurses are also responsible for documenting this instruction in the nurses' notes of patient medical records for legal reasons, as well as the establishment of a reliable record of therapeutic measures taken on behalf of the patient. This leads to improved interdepartmental communications and a more consistent, effective pattern of health care and education.

The literature indicated, however, that there are problems that interfere with health education of patients and the recording of this instruction by nurses in the written nurses' notes. Many of these problems can be identified by conducting a nursing audit, specifically a retrospective audit of patient medical records and nurses' notes. Review of the literature was concluded by indicating that the nursing audit is one means of evaluating nursing care and enhancing communication among nurses, which will hopefully lead to a more consistent pattern of patient health education.

In order to determine if cardiovascular nurses were communicating among themselves regarding patient health

instruction, a retrospective chart audit of the nurses' notes was conducted. A random sample was chosen from those patients discharged from the cardiovascular service at St. Luke's Episcopal Hospital in Houston, Texas, during the month of June 1977. In order to be considered a part of the sample, patients needed to have been diagnosed with a cardiovascular problem, cared for by cardiovascular nurses on a cardiovascular nursing unit, and discharged during the month of June 1977. Hospital policy dictated that a release be obtained from every physician whose medical records were reviewed. Since the number of attending physicians and surgeons was rather large, five cardiologists and cardiovascular surgeons were selected to obtain permission to review their medical records. It was estimated that these doctors' case loads constituted approximately 90 percent of the total number of patients discharged per month from the cardiovascular service.

Ninety-two patient medical records were reviewed, and data were collected and analyzed using statistics for nominal data to include categorizing, frequencies, and percentages. Results were depicted by figures, specifically the bar graph, and by tables. The results of the audit indicated that sixty-five entries were made regarding health instruction by cardiovascular nurses. Registered nurses were responsible for 60 percent of all incidences of

recorded health instruction, with licensed vocational nurses recording 19 percent. Nurses during the day shift recorded 72 percent of the entries, whereas 28 percent were recorded on the evening shift.

Patients were categorized according to diagnosis and whether they were treated on a medical basis or underwent surgery. The random sample contained only 22 percent of patients treated medically and it was difficult to compare recorded incidences with those of surgical patients since the difference was so great. For those individuals who underwent surgery, there was a higher percentage of recorded preoperative instruction than postoperative instruction by cardiovascular nurses.

Patients' diagnoses were categorized to determine if incidence of instruction was higher for one condition versus another. The highest percentage was recorded for patients having coronary artery disease. Area of instruction was also looked at and found to be quite varied. Postoperative instruction accounted for the highest percentage of recorded health instruction. The number of days patients were hospitalized and times hospitalized for cardiovascular problems were analyzed in relationship to percentage of recorded incidences of health education. Generally, it was found that the highest percentage of recorded health instruction was recorded for those patients hospitalized

from nine to twelve days and those patients with the second hospitalization for cardiovascular problems. Conclusions, implications, and recommendations from this study were made and are presented as follows.

Conclusions

Based on the analysis of data obtained from this study, the following conclusions were made:

1. The actual incidence of recorded health instruction was considered to be quite low in comparison to the number of medical records audited and total number of days patients were hospitalized
2. If cardiovascular nurses are participating in patient health education, they are not recording what instruction they gave
3. Registered nurses communicated more through the written nurses' notes regarding patient health instruction than did licensed vocational or student nurses
4. There was more written communication regarding patient health instruction for the day shift than during the evening shift
5. More preoperative than postoperative instruction was recorded and communicated by nurses for surgery patients
6. Nurses recorded more health instruction for patients diagnosed with coronary artery disease and/or progressive angina

7. Patients hospitalized from nine to twelve days had the highest incidence of recorded health instruction relative to current hospitalization

8. Patients hospitalized for the second time with cardiovascular problems had the highest incidence of recorded health instruction when number of hospitalizations was considered

9. Cardiovascular nurses are not consistent in recording what health instruction they are doing with patients, nor are they indicating what specifically the patient has been taught and his/her response to this health instruction

Implications

Based on the results of this study, it would seem appropriate that cardiovascular nurses need to reexamine their nurses' notes in relation to the recording of health instruction rendered their patients. In a case of litigation, the absence of written documentation of patient health care and health education would be interpreted as having not occurred. Instruction recorded in a broad sense and without appropriate patient participation or response could also be misinterpreted or unclear from a legal, as well as from a communications, standpoint.

There cannot be a consistent, effective, and meaningful pattern of patient health education if there is

little, or poor, communication among nurses. Nurses share the responsibility of instructing the patient and for communicating what instruction a patient has received in a manner which is clear, concise, and meaningful to other nurses and health team professionals. Nurses and nurse administrators need to look closely at the nurses' notes and attempt to identify why the incidence of recorded health instruction is so low. Once the problem has been recognized, then means for correcting the deficiency can be implemented.

The findings of this study have implications for nursing educators who assume the responsibility for instructing students in the principles of patient health education and the written nurses' notes. Students should be taught the importance and necessity of communicating through the written nurses' notes what health instruction their patients have received. They need to be made aware of the legal ramifications and responsibilities of the nurse as she takes on an expanded role.

The implications of this study should affect all nurses and students involved in the health education of patients. They all have a part in the consistency and effectiveness of health care instruction their patients receive, and a chance to better the communications system among themselves.

Recommendations

Based on the findings of this study, the following recommendations are offered:

1. A similar study should be conducted using a larger sample size and different geographical location
2. This study should be duplicated at a point in time when student nurses would be better represented
3. A study should be conducted to determine if nurses are involved in health education of patients, but are not recording what they instruct, versus no instruction having taken place at all
4. A study should be conducted to determine the quality of health instruction that does take place in relationship to what is recorded
5. A study should be conducted to determine a comparison of patient health instruction recorded by registered nurses from the Associate Degree, Diploma, and Baccalaureate nursing programs
6. A study should be done to determine the affects of staffing on incidence of written communication regarding health education
7. A similar study should be conducted which includes the night work shift of nurses

APPENDIX

LIST OF CRITICAL TERMINOLOGY INDICATING HEALTH EDUCATION

1. Teach
2. Instruct
3. Educate
4. Train
5. Inform
6. Explain
7. Demonstrate
8. Advise
9. Discuss
10. Reinforce
11. Review
12. Emphasize
13. Formulate
14. Talk
15. Go over
16. Provide (as in information)
17. Tell

CITED REFERENCES

- American Nurses' Association. Standards of Nursing Practice. Kansas City, Missouri: The Association, 1973.
- Berg, Helen V. "Nursing Audit and Outcome Criteria." Nursing Clinics of North America 9 (June 1974): 331-335.
- Cates, Mary E. "How to Write Easy, Efficient, and Excellent Nurses' Notes." The Journal of Practical Nursing 22 (June 1972): 24-25.
- Christopoulos, Angelos C. "Do You Read the Nurses' Observation Notes?" Journal of Psychiatric Nursing 8 (January-February 1970): 24-25.
- Corn, Florence, and Magill, Kathleen. "The Nursing Audit-- A Tool for Peer Review." Supervisor Nurse 5 (February 1974): 20-21.
- Diddie, Pamela J. "Quality Assurance." Journal of Nursing Administration 6 (July-August 1976): 6-8.
- Donovan, Helen. "The Personalized Nursing Audit." Supervisor Nurse 2 (December 1971): 37-38.
- Eddy, Lyndall, and Westbrook, Linda. "Multidisciplinary Retrospective Patient Care Audit." American Journal of Nursing 75 (June 1975): 961-963.
- Evans, M. W. "An Introduction to Health Education in Hospital." Nursing Mirror 139 (October 1974): 49-50.
- "Every Nurse a Teacher." Australian Nurses' Journal 4 (July 1974): 31-33.
- Fitzharris, Johanna. "Verbal and Written." Nursing Times 68 (May 1972): 581.
- Fylling, Carelyn P., and Etzwiler, Donnell D. "Health Education." Hospitals 49 (April 1975): 95-97.
- Galli, Nicholas. "Foundations of Health Education." The Journal of School Health 46 (March 1976): 158-165.

- Hanna, Karolyn K. "Nursing Audit at a Community Hospital." Nursing Outlook 24 (January 1976): 33-37.
- Hart, Laura K., and Frantz, Rita A. "Characteristics of Postoperative Patient-Education Programs for Open-Heart Surgery Patients in the United States." Heart and Lung 6 (January-February 1977): 137-142.
- Hershey, Nathan, and Lawrence, Roger. "The Influence of Charting Upon Liability Determinations." Journal of Nursing Administration 6 (March-April 1976): 35-37.
- Hershey, Nathan. "Nurses' Notes--They Can Play a Critical Role in Court." American Journal of Nursing 69 (November 1969): 2403-2405.
- Holle, Mary L. "Retrospective Nursing Audit--Is It Enough?" Supervisor Nurse 7 (July 1976): 23-29.
- Howard, Frances, and Jessop, Penelope I. "Problem-Oriented Charting--A Nursing View Point." Canadian Nurse 69 (August 1973): 34-37.
- Kelly, Nancy C. "Needed: A Comprehensive Information System for Nurses." Supervisor Nurse 2 (May 1971): 38-53.
- Kerr, Avice H. "Nursing Notes: 'That's Where the Goodies Are'." Nursing 75 5 (February 1975): 34-41.
- _____. "Nurses Notes: Making Them More Meaningful." Nursing 72 2 (September 1972): 7-11.
- Kron, Thora. The Management of Patient Care. 4th ed. Philadelphia, London, Toronto: W. B. Saunders Company, 1976.
- Kucha, Delores. "The Health Education of Patients: Assessing Their Needs." Supervisor Nurse 5 (April 1974): 26-29.
- Lee, Mary E. "Putting the Health in the Health Institution." Journal of Nursing Administration 2 (January-February 1972): 10-11.
- Lesparre, Michael. "The Patient as Health Student." Hospitals 44 (March 1970): 75-80.
- Lewis, Wilma R. "Health Behavior and Quality Assurance." Nursing Clinics of North America 9 (June 1974): 359-366.

- McNabb, Betty W. "The Nurse--and the Medical Record." Supervisor Nurse 2 (November 1971): 17-31.
- Morgan, Dorothy M. "Evaluation by Audit: A Check System for Nursing Care." Dimensions in Health Service 51 (March 1974): 10-12.
- Phaneuf, Maria C. The Nursing Audit: Self-Regulation in Nursing Practice. New York: Appleton-Century-Crofts, 1976.
- Phaneuf, Maria C., and Wandelt, Mabel A. "Quality Assurance in Nursing." Nursing Forum 13(4) (1974): 328-345.
- Prendergast, Judith A. "Implementing Problem-Oriented Records in a Primary Nursing System." Nursing Clinics of North America 2 (June 1977): 235-246.
- Redman, Barbara. The Process of Patient Teaching in Nursing. 3d ed. St. Louis, Missouri: The C. V. Mosby Company, 1976.
- Rubin, Charlene; Wallace, Cynthia; and Hill, Ruth. "Auditing the P.O.M.R. System." Supervisor Nurse 6 (September 1975): 23-31.
- Sanford, N. Self and Society. New York: Atherton Press, 1966.
- Schlesinger, David A. "Health Education." Hospitals 47 (April 1973): 137-140.
- Somers, Ann R. "Consumer Health Education--To Know or to Die." Hospitals 50 (May 1976): 52-56.
- Thoma, Delores, and Pittman, Karen. "Evaluation of Problem-Oriented Nursing Notes." Journal of Nursing Administration 2 (May-June 1972): 50-58.
- Travelbee, Joyce. Interpersonal Aspects of Nursing. 2d ed. Philadelphia: F. A. Davis Company, 1971.
- Trout, Ferne. "Three Methods of Nursing Audit." Dimensions in Health Service 51 (September 1974): 38-40.

"A Unified Approach to Health Teaching: AAHPER Position Statement." The Journal of School Health 41 (April 1971): 171.

University of Texas M.D. Anderson Hospital and Tumor Institute. "Communications Study." Houston, Texas: Houston Department of Medical Communications, 1969.

Watson, Annita, and Mayers, Marlene. "Evaluating the Quality of Patient Care Through Retrospective Chart Review." Journal of Nursing Administration 6 (March-April 1976): 17-21.

Winslow, Elizabeth H. "The Role of the Nurse in Patient Education." Nursing Clinics of North America 2 (June 1976): 213-221.

Woody, Mary, and Mallison, Mary. "The Problem-Oriented System." American Journal of Nursing 73 (July 1973): 1168-1175.

SELECTED BIBLIOGRAPHY

- Atwood, Judith; Mitchell, Pamula H.; and Yarnall, Stephen R.
"The POR: A System for Communication." Nursing Clinics of North America 9 (June 1974): 229-34.
- Bashook, P. G. "Education Plan Key to POMR Success."
Hospitals 49 (April 1975): 54-58.
- Brogan, Midlred M. "What Is Worth Doing Is Worth Recording."
Occupational Health Nursing 17 (January 1969): 9-14.
- Chelel, Ann G. "Communication Problems Among Nurses."
Perspectives in Psychiatric Care 7 (March-April 1969): 92-93.
- Ellis, Geraldine L. "PSRO's Background and Perspective."
AORN Journal 22 (August 1975): 169-78.
- Gagnon, Muriel E. "A Missing Link: OR Nurses' Notes."
AORN Journal 24 (October 1976): 810-12.
- Gruendeman, B. J.; Olgas, Kassie A.; and Parlapiano, Martha J.
"Is Nursing Audit Relevant for OR Nurses?" AORN Journal 19 (January 1974): 98-99.
- Hector, Winifred. "The Role and Preparation of the Teacher."
Nursing Times 68 (November 1972): 1460-61.
- Hunter, Alice R. "Nursing Audit Pinpoints Needs." AORN Journal 20 (August 1974): 241-44.
- Ireland, M. "Meaningful Nurses Notes." Nursing Homes 23 (February-March 1974): 16.
- Isler, Charlotte. "Nursing Audit: New Yardstick for Patient Care." RN 37 (December 1974): 31-35.
- Kneedler, Judith A. "Corrective Action Completes Audit Cycle."
AORN Journal 26 (September 1977): 485-94.
- _____. "Nursing Process Is Continuing Cycle." AORN Journal 20 (August 1974): 245-48.
- Lang, Norma M. "Quality Assurance in Nursing." AORN Journal 22 (August 1975): 180-86.

- Luttman, P. A. "OR-RR Nursing Record Improves Care." AORN Journal 22 (December 1975): 909-912.
- McConnell, Edwina A. "Nursing Audit for Recovery Room." AORN Journal 26 (September 1977): 525-30.
- Malloy, Jan L. "Taking Exception to Problem-Oriented Nursing Care." American Journal of Nursing 76 (April 1976): 582-83.
- Miller, Gerald, and Nicholson, Henry E. Communication Inquiry: A Perspective on a Process. Massachusetts: Addison-Wesley Publishing Company, Inc., 1972.
- Mohr, B. J. "JCAH Patient Care Audit." AORN Journal 22 (August 1975): 187-90.
- O'Reilly, E. "A Comprehensive Record." Nursing Times 68 (May 1972): 612.
- Pelly, G. "One Step Towards Quality Assurance." Hospitals 49 (April 1975): 77-78.
- Reed, Elizabeth A. "OR Nursing Audit Becomes a Reality." AORN Journal 26 (September 1977): 479-84.
- Roberts, G. "Patient Reporting." Nursing Mirror 140 (January 1975): 68-69.
- Roberts, Karlene H.; Cerruti, Nannette L.; and O'Reilly, Charles A. III. "Changing Perspectives of Organizational Communication: Can Short-Term Intervention Help?" Nursing Research 25 (May-June 1976): 197-200.
- Roget's College Thesaurus. New York: The New American Library of World Literature, Inc., 1964.
- Rubin, Charlene F.; Rinaldi, Leena A.; and Dietz, Ruth R. "Nursing Audit--Nurses Evaluating Nursing." American Journal of Nursing 72 (May 1972): 916-21.
- Storz, R. "The Role of a Professional Nurse in a Health Maintenance Program." Nursing Clinics of North America 7 (June 1972): 207-23.
- Vaughan-Wrobel, Beth C., and Henderson, Betty. The Problem-Oriented System in Nursing. St. Louis: The C. V. Mosby Company, 1976.

Webster's New Collegiate Dictionary. Springfield,
Massachusetts: G and C Merriam Company, 1973.

Wiley, L. "Communications: Understanding the Gravity of
the Situation." Nursing 76 6 (April 1976): 97-98.