

**AN ACTIVITY ANALYSIS OF NURSING PERSONNEL
ON TWO SELECTED UNITS IN A
GENERAL HOSPITAL**

by

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CHAPTER I

INTRODUCTION

Background of the Problem

The critical deficiency in the supply of nursing personnel for the health services is widely recognized as a major social problem in the United States today. ⁽³⁾ This shortage is an intensely personal problem to the patient requiring nursing care, his family, his physician, and the shorthanded nursing staff responsible for his safety and welfare. This is a national problem of quantitative, qualitative, and distributive supply of an indispensable service to society. ⁽⁴⁾

The tremendous increase in demand for nurses has so far outstripped the increase in supply. The primary cause, perhaps, is the rapidly developing awareness on the part of the American people that expanded health services are vital to their welfare. ⁽⁷⁾ Advances in medical sciences and the development of technological procedures dependent on hospital facilities have revolutionized the medical care. Every new development creates new responsibilities for nursing. ⁽¹⁰⁾

The process of turning over more and more technical procedures to nursing by the doctors began in the seventies and eighties of the past century with the introduction of antiseptic and aseptic techniques. (20) The proportion of acutely ill patients in the hospitals has greatly increased since World War II because of the quick recoveries made by the use of new drugs and therapeutic measures. The heavy demands on doctors and the constant or frequent attention required by present diagnostic practice necessitates the transfer of many responsibilities and functions to the professional nurse.

Mounting demands for health services are reflected in increases in hospital construction, the growth of hospitalization and medical care insurance, press stories criticising or praising medical, nursing, and hospital services. Demand for service far beyond the capacity to provide it is not limited to nursing. The shortage of teachers, social workers, and others compares with that of nursing. (28)

The 1960 White House Conference on Children and Youth made recommendations directed to education, home life, and community services. One major concern was the question of how to solve the problem of the shortage of personnel in the health

professions. Discussions concerned with the doctor shortage recommended that nurses might be trained as obstetric assistants to relieve the physician load; that public health nurses follow-up of mentally ill patients might be broadened to relieve the social worker; that nurses might take over more of the preventive work in child health services to relieve the pediatrician. (36) All of these recommendations directed more responsibility to the already short-staffed nursing profession.

The number of professional nurses does not meet the demand for nursing service today. In Nurses for a Growing Nation, the National League for Nursing states:

Practical nurses and auxiliary nursing workers trained on the job have come along in increasing numbers to fill the gaps. The scarcity of professional nursing skills, brought about by demand for nursing service, has made it necessary, even desirable, to transfer many of less complex nursing tasks to persons who do not need the extensive preparation for professional nursing.

Nursing is not alone in employing such a pattern to spread its scarce professional and specialized skills. The transfer of lesser skills from higher trained workers to those with more modest preparation has made possible much of the American industrial production of recent years. Among the professions, the law clerk now helps the lawyer to use his knowledge to benefit more clients. The dental aide enables the dentist to treat more patients. Education is experimenting with teacher aides as a means of freeing the teacher from non-teaching duties and conserve her skills for actual teaching. (27)

As demands for skills increase, it usually follows that the skills themselves increase in both number and complexity. The most economical and satisfactory way of providing services is by extending skills over a number of people with varying degrees of training for the services to be rendered. (8)

Owing to the insufficient number of nursing personnel, it is especially important that each member of the nursing group contribute to his maximum ability and competency. This can only be brought about by the proper utilization of the existing personnel. For example, head nurses are spending time on clerical work which could be spent in the supervision of patient care; staff nurses are spending time running errands and on clerical work which could be better spent in direct service to the patient. (13) In contrast, some nursing personnel may be performing functions for which they have not been prepared or which may be beyond the scope of nursing.

Statement of the Problem

It is the purpose of this study to determine how nursing personnel divide their time between patient-care and unit activities in two selected units in a privately-owned general hospital. This study will attempt to answer the following questions:

1. How do nursing personnel divide their time between activities with the patient and activities away from the patient?
2. Is the time spent away from the patient spent on duties related to his care or on non-nursing functions?
3. Are the nursing service personnel in this hospital functioning at their own level?

Limitations of the Study

The participants of this study have been limited to the nursing personnel on two selected units in one general, privately-owned hospital. These include the head nurse, assistant head nurse, staff nurses, licensed practical nurses, nurses aides, and the ward clerk.

The study is limited to the data collected from the observation of the nursing personnel working between the hours of 7:00 am. and 3:30 pm. for five consecutive days, Monday through Friday on each unit.

The study is further limited by the use of the work-sampling technique for observing the activities of personnel at work.

Assumptions

For the purpose of this study it is assumed that:

1. The nursing personnel, during observation, will be functioning in their usual manner and will therefore not perform in such a fashion as to distort the data.
2. The activities observed during 80 hours of observation will be representative of the activities that could be observed in a longer period of observation.
3. The work-sampling technique is a valid method of observation and the tool is adequate for this study.

Justification of the Study

Activities and functions of the nursing personnel in the hospital environment are constantly changing and a reappraisal of the activities of all personnel is important to the maintenance of optimum service. Those giving nursing care can experience greater job satisfaction when their skills are used to the fullest. ⁽¹⁴⁾

Numerous studies have indicated the need for continuous analysis of how the nurse is functioning in the hospital.

Helen Bunge pointed out that the need for study of activities stems from these factors:

1. Functions of nursing personnel must be clearly defined before educational programs can be intelligently reviewed and criticised. "A functional analysis of a job should include a thinking through of what the function should be tomorrow, as well as a review of what nurses are doing today." (11)

2. Now the trend is toward a much closer tie-up between classroom study and actual practice. Good nursing schools have introduced more bedside teaching, more conference work on the wards, all centered on the care of the patient. That is why it is so important, from the standpoint of student education, to obtain practice experience where the quality of nursing service is favorable. Students are frequently exposed to conditions of low standards and yet are expected to know how to give good nursing care upon graduation. (11)

Clear demarcation of function among the various levels of nursing service personnel is a first step toward better utilization of all personnel. When personnel are required to do a higher level of work than that for which they are paid, dissatisfaction and low morale usually result. (28)

In the nurse utilization project of the State University of Iowa, An Investigation of the Relation Between Nursing Activity and Patient Welfare, the researcher stated:

Specific tasks of nursing work are not clearly allocated to the various classes of workers, that is, there is much over-lapping of duties among professional nurses, practical nurses, and subsidiary personnel. The reason why a certain worker performed a particular task appeared to depend upon the geographic location of the hospital where she worked, the clinical nursing department to which she was assigned, and what kind of a person she was. This was further evidenced by the confused attempts (1) to divide nursing work into so called professional and non-professional tasks and (2) to separate out from all the tasks performed by nursing personnel those which are non-nursing tasks. (19)

"Just as we are aiming toward maximum utilization of the skills of the professional nurse, studies should be initiated immediately to determine the unique contribution to be made by the trained practical nurse in meeting present and future needs for nursing service." (14)

In the area of on-the-job training of the nursing aide, the study of nursing activity will give information as to the possible need for a stronger in-service program for the aide as well as in-service preparation of the professional nurse who supervises and plans for their effective utilization on the ward units. (24)

It is concluded from these statements that a study of the activities of nursing personnel is consistent with the recommendations of authorities in nursing service and nursing education.

Definitions

For the purpose of this study, the following definitions have been accepted:

1. The unit refers to the department or section of a hospital to which nursing service personnel are assigned.

2. A patient unit is that area of a unit designated as "belonging" to one patient. It could be a private room or part of a ward.
3. The head nurse is the nurse who has full time responsibility for the administration of the nursing unit during her tour of duty.
4. The assistant head nurse is the nurse who has full time responsibility for assisting the head nurse and who assumes responsibility for the management of the unit in the absence of the head nurse.
5. Registered nursing staff refers to those graduate nurses who give direct care to patients and hold a current license to practice as registered nurses. The term registered nurse and professional nurse are used interchangeably throughout this study.
6. Licensed practical nurse is a person prepared by an approved school for practical nursing and has a license to practice nursing.

7. Nursing aide and/or orderly is a non-professional nurse, trained on the job, who assists the nursing staff in giving patient care.
8. The clerk assists the head nurse and the assistant head nurse with the clerical work of the unit. She also runs errands and maintains the supplies for the unit.

Plan for the Study

The plan for the study may be described in the following steps:

1. Selection of the site and the subjects from which the data will be collected.
2. Obtain administrative permissions and cooperation to conduct the study. Obtain information as to the ratio of the categories of nursing personnel.
3. Make definite plans for observation study as to the units selected and the weeks of observation.
4. Refine tool to the specifications of the units to be studied.
5. Carry out a trial run to aid the researcher in the use of the tool and the recording technique.
6. Explain the study to the nursing personnel directly involved in the study and to those indirectly involved to obtain their cooperation.
7. Confirm schedule for obtaining data with the Director of Nursing Service.

8. Make work-sampling observations of the selected personnel.
9. Total the time spent in each activity category and convert to percentages of the total observation period.
10. Set up tally sheets for recording activities observed during each eight hour day and record totals in the last column of the tally sheet.
11. Transfer totals to worktables to show frequency of performance of each activity by each title of personnel.
12. Prepare summary sheets of activities for all units and a summary of the total from the worktables.
13. Draw conclusions presented by data.
14. Formulate recommendations, if any, for further studies.

Overview

Chapter II will consist of a resume of the literature and studies related to this study. Chapter III will present a description of the study and an interpretation of the findings. Chapter IV will summarize the study, and will include statements of conclusions and recommendations for further study.

CHAPTER II

REVIEW OF LITERATURE AND RELATED STUDIES

World War II and the post-war years brought a change in the concept of nursing. The modern concept of adequate patient care interprets the care in hours of total patient needs which range from those which require a scientific knowledge and technical skill of the professional nurse to those which may be satisfactorily performed by non-professional workers.⁽¹⁰⁾ This concept, that there are levels of nursing care, should be definable so that the function of each level can be determined.⁽⁶⁾

Research workers and administrators have learned from the detailed studies of industry that it is possible to analyze the work-pattern of an employee and ascertain the component activities involved.⁽¹⁵⁾ These activities can be analyzed through observation and recording of the pertinent information related to a specific job.⁽²⁵⁾

An analysis of a job, resulting in a job description is regarded as essential for a number of reasons:

1. To insure some uniformity of classification for similar activities and responsibilities.

2. To provide some equitable pay in the large number of jobs that are similar.
3. Standards used as a rationale for personnel administration, some foundation for reasonable expectancies of promotion, and to serve as a basis for establishing employment standards. (15)

General education has used job analysis and teachers' activities in the classroom as a means of defining curriculum content for teacher training. (8)

Viola Bredenberg in her dissertation, Nursing Service Research, published in 1951 used job analysis as a basis for her study. "The changing function of the professional nurse and the advent of teamwork in nursing service picture throughout the hospital had changed actual job functioning sufficiently to warrant a job analysis, if for no other reason." (5) Data from job description of all levels of nursing studied and the essential proponents were listed in order of their importance. It was found that responsibility increased with the importance of the job. Another finding was that the auxiliary nursing personnel had relieved the professional nurse of routine and less skilled duties, and that the use of auxiliary personnel was necessary. (5)

An experiment, part of the above study, was a time analysis of the non-clerical activities of the nursing staff. Data were

collected for six consecutive days during the hours of 7:00 am. to 4:00 pm. During the experimental situation, a ward clerk performed these activities in a similar unit. The effect of the experimental factor (the ward clerk) had relatively drastic effect on the functioning of the head nurse, the assistant head nurse, and the staff nurse. In the controlled situation the head nurse group spent 37.8 per cent of her time in non-nursing clerical function. This was reduced to 3.1 per cent by the use of the ward clerk. Relieved of the clerical work the head nurse had more time to supervise the nursing teams.

A third portion of the study was devoted to experimental patterns of nursing teams. Bredenberg concluded the ratio of one professional nurse to two non-professionals was the most desirable from the standpoint of the professional nurse. The 1:2 ratio facilitated efficiency in the functioning of all personnel. The two recommendations made from this study were an analysis of the patient care assignments within the nursing service teams and an activity analysis of all professional and auxiliary nursing service personnel. (5)

Two methods for making observation of the activities of personnel have evolved. One method utilizes continuous, timed observation and requires one observer to shadow one person continuously throughout the observation period. This technique helps the observer understand the total job of the person under observation, but restricts the number of people to be observed. (2)

To observe the group at work, the work-sampling technique was developed by industry. This method proved less costly in that it permitted one observer to note the activities of up to fifteen people, using intermittent instantaneous observations. (2)

Work-sampling is based on the law of probability. If a sufficient number of observations of the same operation are taken at random times, the average will approximate the results measured by continuous observation. (35)

By collecting a large number of observations a representative and reliable evaluation of nursing activity can be obtained. Although intermittent observation may be less costly it will not give a complete evaluation of the number or kinds of tasks, or how frequently personnel change from one task to another. (29)

One of the disadvantages of the continuous observation of groups is that the continual presence of observers may influence

the work situation, disturb ward routine and upset the patients. In contrast, work-sampling with its intermittent observations would mean an observer on the unit a few minutes out of every hour. (9)

A continuous observation study was done by Elizabeth A. Greene at Mount Sinai Hospital in New York City in 1925. The study attempted to determine the amount of time needed to administer suitable and adequate care to the average hospital patient. Greene observed the graduate nurse listing all her activities over a twenty-four hour period. (17)

In 1926, the Committee on Grading of Nursing Schools outlined a five-year project for an analysis of nursing procedures to be used as a format in their plan of bringing the teaching of nursing into some defined standards. The problem of an analytical study of nursing was delegated to Ethel Johns and Blanche Pfeifferkorn. Johns, as a part of the study, conducted a continuous observation study of the graduate nurse in fifteen hospitals on the east coast. This, the first published job analysis in nursing, was published in 1932. (23) in the American Journal of Nursing under the title "Nursing In Fifteen Hospitals Studied".

The final report of Johns and Pfefferkorn was published in 1934 by the Committee on the Grading of Nursing Schools.

An Activity Analysis of Nursing listed some 750 tasks performed by nurses. The Committee implied that by defining the function of nursing there would be a closer collaboration between the theory of nursing and practice. (22)

The Department of Studies of the National League for Nursing Education directed a study in the state of New York which used the observation method along with a questionnaire and interviews with hospital personnel and hospital administrators.

A Study of Nursing Service in One Children's and Twenty-One General Hospitals published in 1948 describes the study and results in detail. The purposes of the study were to secure information on the type of nursing personnel in these hospitals giving care to patient, the amount of nursing care needed per patient, and the proportion of those hours which could be given by professional and non-professional workers. The particular emphasis of this study was directed toward the use of the non-professional worker in giving direct care to patients.

The functions of the nursing aides were observed, their duties compared with standards set-up for their functions within

the individual hospitals. The Committee on Studies of the National League for Nursing concluded that each institution should work out with great care, its own list of duties based on the nursing needs of the patients.

Recommendations for the use of the nursing aide were:

1. The patients be selected with reference to their total needs and the aide be used in the care of the less seriously ill.
2. Lists of duties be carefully worked out and specifically stated.
3. Daily assignments be written out carefully.
4. In-service be adequate to prepare aides for their specific duties. (24)

Phoebe H. Gordon, another proponent of the continuous observation method, conducted a study at the University of Minnesota on the activities of the head nurse. This study, done in 1934, was followed later by a large study at the Charles T. Miller Hospital in St. Paul, Minnesota. The study was undertaken for the purpose of increasing efficiency and job satisfaction through extension and application of the knowledge of nursing activities. (16)

The study at the Charles T. Miller Hospital was the first study completed under the program of studies of nursing functions

financed by the American Nurses' Association.

In 1950, the American Nurses' Association House of Delegates decision to study nursing function in a five-year program of research lead to numerous studies. A Master Plan, devised to guide research into the nurses' work, made the following assumptions:

"If there is a shortage of skilled professional nurses, and if new recruits cannot be obtained and trained in sufficient quantities, then the work of the professional nurses should be modified so that they do not engage in time-consuming tasks which can be carried out by other occupational groups with a shorter period of training."

Before any such reallocation of duties and responsibilities can be carried out it is necessary to know:

1. how the professional nurses allocate their time under present conditions;
2. how auxiliary nursing personnel allocate their time under present conditions;
3. how the use of time varies in different parts of the country and in different kinds of hospitals;
4. if professional nurses are expending large blocks of time on functions which conceivably could be carried out by others. (26)

Of the thirty studies sponsored by the American Nurses'

Association, fifteen used time studies as their method of answering the questions raised by the Master Plan. Twenty Thousand Nurses Tell Their Story⁽²¹⁾ published in 1958 summarized these studies. The authors stated that the studies of timed functions are "the core of the entire program into the nurse's work". Although the technique varied from study to study, the fundamental technique of observing nurses and classifying their activities was used. The actual statistical analyses are not available for review.

The Harper Hospital Study, conducted under the direction of Marian J. Wright and described in The Improvement of Patient Care, applied the work-sampling technique to the hospital situation. The study group accepted the fact that employee satisfaction, in addition to fair hours, is based on opportunities for maximum utilization.⁽³⁵⁾

The study was sponsored by the American Hospital Association and the trustees of the hospital for a period of three years. Three other Detroit hospitals, Grace, Hackley, and Cottage, participated in the study. As a background, questionnaires were administered to the patients and the medical staff to obtain their opinions of the nursing care being given. Data were collected as to the degree of illness of the patients and the kind of care needed.

Work-sampling observations were employed to determine the activities of the various levels working together. The activities were recorded according to shifts, the size of the unit, the nature of the service, and the physical layout which might involve travel time. The findings from the observation study were used as the basis for the development of staffing patterns.

The conclusions drawn from the study were:

1. "the graduate professional nurses will have to spend more time in supervising, even if it means less performance of actual function with their hands. . .
2. the education of the nursing service personnel must be accompanied by thoroughly satisfactory attitudes on the part of all. . . .
3. emphasis must be placed in group participation in the nursing care of patients. . .
4. the functions of the professional nurse, practical nurse, aide, orderly and clerk are going to change constantly as further changes are recorded in public demand and in the development of new techniques and medications. . .
5. improvements are always possible to those who are open-minded enough to want to make them." (35)

The United States Public Health Service sent Faye Abdellah to Michigan in 1953 to direct a study of nursing needs in the state. The Permanent Conference Committee, made up of organizations

most directly concerned with nursing service problems, consisted of representatives of The Michigan State Nurses' Association, The Michigan League for Nursing, The Michigan Medical Society, and The Michigan Hospital Association. This committee sponsored the study and it was financed by the Cunningham Drug Company Foundation.

As part of the study, nine units of three Michigan hospitals were observed using the work-sampling technique. The purpose was to test the usefulness of this technique as a method of analyzing the activities of all nursing service personnel on a patient unit. The major findings of the three hospitals were so comparable that they were treated as one. Patients in all units received an average of forty-eight minutes to one hour less nursing care than the hospital was providing each patient during the twelve-hour period and 11 to 22 per cent of all nursing time observed was spent on activities of other departments; 12 to 20 per cent was consumed by clerical work and from 10 to 50 per cent of nursing personnel time was spent on activities of other levels. (28)

As a result of the study in Michigan, the Public Health Service published How to Study Nursing Activities in a Patient Unit in 1954. The work-sampling technique is described and the categories

of nursing activities are listed. (30) Another publication, The Head Nurse Looks at Her Job was developed by the Public Health Service following a study by Applonia Olson and Helen Tibbetts at the Massachusetts General Hospital. This manual reports on the use of direct and continuous observation for the purpose of assisting the head nurses to analyze their activities and assess them as to their appropriateness to their job. (29)

With a grant from the Sarah Millon Scaife Foundation, The University of Pittsburgh School of Nursing conducted a series of studies of personnel utilization. Under the direction of Frances George, Professor of Nursing Education, and Ruth P. Kuehn, Professor of Nursing Education and Dean of the School of Nursing, the study was published in 1955 under the title Patterns of Patient Care. The studies were designed to answer questions related to the reassignment of nursing functions, the educational program provided for non-professional personnel, and the program for professional students and graduate nurses.

The Pittsburgh study explored the literature to determine what authorities in physiology, psychology, sociology, social work, and education considered basic human needs. In light of defined

human needs, a definition of adequate care was developed. Concentrating the study to one medical-surgical ward of Women's Hospital, one of the seven hospitals included in the University of Pittsburgh Medical Center, four observation studies were conducted. The purpose was to seek answers to the questions:

1. How much professional nursing service is required for medical-surgical patients?
2. How much and what kind of non-professional nursing service is required?
3. How can the patient and the nursing service personnel be organized into groups to provide the most effective care for each individual patient?
4. Can a staffing pattern be designed and demonstrated that will provide continuity of service for the patient and a balanced rotation of personnel from one tour of duty to another. (14)

The ward chosen for the study had a daily census that averaged 29.5 patients with approximately 66 per cent professional nurses to 34 per cent non-professional. The ward was observed in this sequence: Study No. 1 - the ward clerk; Study No. 2 - the nurse aide; Study No. 3 - the practical nurse, and Study No. 4 - group pattern. The findings were:

1. Prior to the introduction of the ward clerk 37 hours per week of time spent by the head nurse and the assistant head nurse were

devoted to transferring doctors' orders to the Kardex and the writing of requisition slips.

2. There is a need for in-service training to prepare the professional nurse in the supervision of the nurse aides for their effective utilization.
3. The practical nurse skills were not utilized economically for approximately 80 per cent of the activities allocated to the practical nurse, in an occupational analysis, could be safely performed by less skilled and lower salaried worker.
4. Any major reallocation of nursing functions will require a new design for patient care which in turn will make new patterns of ward management. (14)

Conclusions drawn from the study were directed toward nursing education. The professional nurse needs a broad general education as well as nursing knowledge and skills in light of the emerging patterns of care. Some changes are needed in the curriculum such as the development of more skill in communications, and more understanding of human relations. It was recommended that each student be exposed to the kind of learning and experience that will help her to understand the meaning of health. It was further recommended that the curriculum develop in the student the ability to maintain good interpersonal relations not only with the people in the health professions but toward all people. (14)

Following the University of Pittsburgh study, the Pennsylvania State Nurses' Association and the Pennsylvania State League for Nursing embarked on a state-wide survey.

Faye G. Abdellah, nurse consultant with the United States Public Health Service, and Janice E. Mickey, associate professor at the Graduate School of Public Health of the University of Pittsburgh directed the survey.

A sample of 138 hospitals of all types participated by providing information about their professional nurses and their educational background. Nursing personnel, both professional and non-professional, in 32 of these hospitals provided information about their educational needs and job satisfactions. Nine general hospitals located in different geographical areas of the state made extensive utilization studies using the work-sampling technique. Fifty-seven nurses were trained in the observation method and these nurses were used to teach others how to apply the process in their individual situations. Five additional hospitals gathered facts and opinions from patients, nurses, and doctors regarding factors contributing to patient satisfaction and dissatisfaction with nursing care.

It was recommended by the study group that there be a fur-

ther expansion of team nursing, in-service, and educational opportunities for graduate nurses. Nurses must help the community to recognize the changing role of the professional nurse. (37)

Change and Dilemma in the Nursing Profession published in 1957, edited by Leonard Reisman and John H. Rohrer, reported a number of research projects financed for five years by the American Nurses' Association through the Louisiana State Nurses' Association. The research staff of the Urban Life Research Institute of Tulane University used interviews and observations along with psychological perception tests as an approach to the study of the nursing professions. The hospital used for the project was Charity Hospital in New Orleans, Louisiana with a capacity of 3,200 patients and a medical staff of 424 doctors with 682 physicians on its visiting staff. It had a daily out-patient census that averaged 5,000 patients. This hospital drew students from two medical schools, a research center, a diploma school of nursing, and a school of practical nurses. In the second year of the five-year project, Virginia H. Walker directed an observation study of the nursing service personnel in the medical and surgical wards of the hospital. In a description of the setting for this study, Walker pointed out some of the differences between Charity and the average hospital unit. The hospital was owned by the State of Louisiana

and the state exercised administrative control. The St. Vincent de Paul Order of Roman Catholic Sisters were responsible for the nursing education and service, social service, and the dietary department. The hospital was highly specialized in character and there was a segregation of white and Negro patients. There was a casual appearance to the wards in comparison with the orderliness of most hospitals. Unique to nursing care were the visitor-attendants. This group was made up of family and friends of the patients. There was no patient care planning as such; the care was given on the assembly-line basis.

During the observation periods, the observer traveled about the ward making intermittent observations. Instead of the usual method of recording, the observations were tape-recorded and transcribed at the end of the day. When the observers could not note new behaviors and the frequency of new events reached zero, they felt that they had an adequate description of what was being done on the individual ward. (31)

The observation study gave the researchers an understanding of the kinds of nursing given, but it was only a step to a larger study of role preception and a controlled experiment which attempted to measure the amount of psychological care given to

the patients. The researchers felt that the observation studies were simply a sample of the "acts" of people and could not be considered a sample of people because no matter how objective the observer, the chance of bias might be introduced, the bias due to the observer's own values, beliefs, and expectations. (31)

The data were tabulated in frequency table and percentages. The physician and medical students gave 8.6 per cent of the total care in the white ward and 6.2 per cent of the care in the Negro ward. The head nurse gave 5.5 per cent in the white wards and 6.4 per cent in the Negro wards. Staff nurses gave 10.6 per cent in the white wards and 8.6 per cent in the Negro wards. The practical nurse gave 7.3 per cent in the white ward against 14.2 per cent in the Negro wards. Nurse aides gave 29.4 per cent in the white wards and 30.7 per cent in the Negro wards. Student nurses gave 14.8 per cent in the white wards and 10.6 per cent in the Negro wards. (31)

Peter Kong-Ming New, Gladys Nite, and Josephine M. Callahan, sociologists, conducted an extensive study for the Community Studies Inc. of Kansas City, Kansas. This non-profit organization was established in 1949 to gather social data on the city and surrounding area to aid in planning community programs of health,

education, and welfare. The staff includes economists, a sociologist, a psychologist, and people with social, legal, and medical training. At the request of a group of nursing and hospital administrators the Community Studies Inc. conducted this study sponsored by the National Institute of Health.

Two hospitals, Trinity Lutheran and Research, in Kansas City, Missouri were asked to participate in a nine-week study. Two units in each hospital were designated as study units. The morning shift, 7:00 am. to 3:30 pm., was observed Monday through Friday during which time the units were staffed by a head nurse, staff nurses, and auxiliary nursing personnel. During the nine-week period two variables were shifted, the hours of care and per cent of graduate nurses on the floor. Three combinations of nursing personnel were used; low nurses -25 per cent graduate nurses; medium nurses -50 per cent graduate nurses, and high nurses -75 per cent graduate nurses. (26)

One of the significant findings was that there was no statistical difference on the types of functions performed by all types of personnel during the nine weeks of observations. When there were fewer personnel on the units time spent in direct care diminished and conversely increased with the addition of more staff. However,

the staff nurses spent more time with fewer patients because the auxiliary personnel also spent time with these patients.

It was concluded that the nursing personnel function in defined patterns. There is a strong association of function with the type of personnel. With so much emphasis on segmentation of roles and functions, the needs of the patient are submerged. Recommended by the study group was the institution of an in-service development program centered around the patient needs.

"For the young graduate is influenced by the personnel with whom she works and her ideals and philosophies of patient-care are challenged by the pattern developed within the hospital. Focusing nursing function on the need of the patient might alleviate the hesitancy of the staff nurse in performing certain functions. When these functions are seen in the context of patient-care rather than status-symbols, the function will become more meaningful."(26)

The study, Nursing Service and Patient Care, was published in 1959.

An Investigation of the Relation Between Nursing Activities and Patient Welfare, published in 1960, was the result of a three-year study which attempted to establish criteria for patient welfare and the influence of changing nursing patterns upon it. The nurse utilization project was supported by a research grant (GN-4786)

of the United States Public Health Service and the State University of Iowa. It was under the direction of Wellborn R. Hudson, PhD. and Richard Simon PhD. with two nurse co-investigators, Myrthe K. Aydelotte and Marie E. Tener.

This report describes the development of the research tool which employed the work-sampling technique and was sensitized to be able to determine difference in nursing activities produced by the two experimental variables. These variables were incrementing and in-service education. The underlying hypothesis was that "increased staffing will produce improvement of patient welfare".⁽¹⁹⁾ One of the assumptions made at the beginning of the study was that if more nursing time were made available to the ward staff, they would spend more time in direct patient care. For this reason two direct patient care categories and five indirect patient care categories were established. Also developed was a Patient Welfare Measure as the criterion for evaluating change in nursing care.⁽¹⁹⁾

A total of five experiments were conducted in which the ward nursing staff was "changed". The preliminary experiment was conducted for a five-week period at base, or normal level of staffing; followed by a ten-week period during which the levels of staffing were increased approximately 40 per cent above base level. Com-

parison of the activities of the two data periods showed a relatively small amount of increased time available was spent in direct patient care. Whereas, a relatively large amount of the additional time was allocated to activities having little relation to patient care. (18)

The experimental pattern was repeated on two female medical wards, one as an experimental ward and one as a control. Again, there was no significant change in the patient welfare measure. The results of these experiments generally contradicted the underlying hypothesis that increase of staffing will produce improvement of patient welfare.

The third and fourth experiments were conducted on two male surgical wards. They consisted of a six-week period at base followed by a three-week period of in-service education program on team nursing, followed by a six-week period of a 40 per cent increase of staff nurses. The final phase was another six weeks at base levels using team nursing. The results showed no increase in the proportion of time spent in direct care during the two periods before and after the in-service program.

It was suggested by the nurse experts that the three weeks

in-service program was too short to produce any marked change in either the nursing activities or levels of patient welfare. (19)

The experiments were repeated on the two wards previously used, again one the experimental and the other the control. This time a six-week period was used during which in-service was conducted on the experimental ward. This had been preceded by a six weeks at base and followed by the same base proportions. This design was repeated a second time and the results were the same; no significant differences noted.

The conclusions of the study suggest that there is a limit to the contribution which nursing care makes to patient welfare and that increasing the staff is an impractical approach to increasing patient welfare. The results also suggest that the shortage of graduate nurses is not as severe as is often believed and the use of more subsidiary personnel has been a satisfactory solution to whatever shortage has existed. (19)

Several recommendations were made. One, that this study be repeated in a hospital that had a lower nursing care hours per patient. The changes, if any, in the level of patient welfare when more nurses are added, would provide valuable information about optimum levels of staffing. Another recommendation made was

that an investigation be conducted to determine what the nurse is actually trying to express when she says, "more nurses are needed". Other factors related to patient welfare and nurse welfare could be investigated. Factors such as optimum size of the patient unit; methods of stabilizing fluctuations in patient load; and the structure of nursing service. (19)

Review of Related Studies

A summary of Virginia Streeter's Master's thesis, A Time Study and Activity Analysis of Professional Nurses in the Medical Staff Division of University Hospital,⁽³³⁾ was published in The American Journal of Nursing in February, 1950. The purpose of the study was to determine how the professional nursing staff spends their time and to ascertain whether or not a reallocation of nursing activities would result in better nursing.

Data were collected from observations of the professional nursing staff for eight hours a day until 192 hours had been recorded. Observations during the week-end were avoided as the working pattern was atypical. The observations were classified into sixteen categories related to patient care. From the tabulations of the categories averages were obtained to indicate how nurses spent their time.

Findings were: (1) between the hours of 7:00 am. and 3:30 pm. the chief duties of the professional nurse were giving nursing care, administering medications, giving treatments, and clerical work; (2) between the hours of 3:30 pm. and 12:30 am. the leading activities were the administration of medications and

performing clerical duties. On these two tours of duty the least amount of time was spent in telephone conversations, admitting and discharging patients, and patient teaching; (3) the amount of time which could have been used for "first level" nursing, such as teaching patients, was spent, to the extent of 2.2 hours each day, in "second" and "third" level work.

Conclusion: The time study is a valid method to be used in seeking logical answers to some of the problems of nursing service. The study was only concerned with the factor of time and did not approach the problem of inadequate numbers of auxiliary personnel.

Available for review was, An Analysis of the Activities Performed by Nursing Personnel in a Selected Surgical Unit During a Period of Five Consecutive Days,⁽³²⁾ an unpublished Master's thesis submitted in partial fulfillment of the requirements for a degree Master of Science at Catholic University of America in 1951 by Sister M. Eugene Joseph Schwartz. The purpose of the study was to determine the activities of the members of the nursing personnel in a selected surgical unit during each of the three periods of assignment for five consecutive days.

Data were collected by means of an activity list arranged in alphabetical order for the convenience of the participants of the study. The list was posted in the nurses' station and the nursing personnel checked the various activities as they completed them. At the end of the collecting period, the data were tabulated under eight categories of activities.

The findings showed: (1) the head nurse performed only a few activities related to personal care; (2) the professional nurses carried out functions in areas of administrations of medicines; (3) the activities reported by the workers were similar to those listed in authentic professional publications as being activities generally considered a part of nursing service.

The recommendation made was, on the basis of the data secured, further study be made of the number of times activities are performed by each type of worker to determine reasons for assigning workers with such widely varying preparation to the same type of activities.

Another related study, An Analysis of the Hospital Service Activities Performed by the Nursing Service Personnel in the Eight Medical and Surgical Units of a Large General Hospital, (12)

an unpublished Master's thesis submitted in partial completion of the requirements for the degree Master of Science at Catholic University in 1954 was written by Sister Mary Gertrude Danaher. The purpose of the study was to analyze the activities of the hospital service which are performed by professional nurses, student nurses, and the auxiliary worker functioning in the medical-surgical units. The observations took place between the hours of 7:00 am. and 7:00 pm. for three consecutive days. The Activity Analysis of Nursing⁽²²⁾ was used as a reference in compiling a list of activities. The activities were tabulated into frequency tables and by levels of personnel.

The findings were: (1) 33 per cent of the head nurses' time was spent in clerical work; and (2) the staff nurse spent more time away from the patient in non-nursing duties than she did in direct care.

Conclusion: The staff nurse is the key person for establishing good patient-nurse relationships and this cannot be accomplished away from the bedside. The nurse must consider all the facets of the patient's welfare and recognize the challenge it presents. Non-nursing duties must be delegated to those workers employed for such a purpose.

A recommendation was made for a further study of the activities of a non-nursing nature so that an experimental program be set up for the full utilization of auxiliary personnel.

A Study of the Activities of Members of Nursing Teams on Selected Wards in Two General Hospitals in Seattle, Washington,⁽³⁴⁾ an unpublished Master's thesis at the University of

Washington in 1950 by Rosalind Mei-Lin Wany was reviewed.

This activity analysis had as its purpose a description of the activities of nursing team members and the interrelationship between those members. Two wards observed were described as well as the function of each member of the nursing team. The period of observation was five days during the hours of 7:00 am. and 3:30 pm.

The findings were: (1) the professional nurse, or team captain, was responsible for the total care of the patients assigned to her team; (2) the members worked independently and the only joint activities were those which needed two people, such as moving patients and putting up side-rails; (3) there was a shifting of many nursing duties to the non-professional, especially when the teams were closely supervised; (4) the problems encountered were the shortage of professional nurses to act as team captains and the lack of understanding by members of the team

of the team concept. No recommendations were made.

In summary, the studies showed that an analysis of the activities of the nurses can be for benefit to provide factual data about how the nurse is spending her time. Because of the wide difference in hospitals, no generalizations can be made on the activities of the nurse. However, in particular situations, analysis can be used when the question of utilization arises.

The two methods of observation developed have advantages to the study of personnel. The choice of technique will depend on the need of those making the study and the setting for the study.

CHAPTER III

PROCEDURE AND FINDINGS

Problem

The problem of adequate nursing service for the patients in the hospitals today has been recognized and analyzed by many authorities. It is a problem that has been met by the individual hospitals by means of optimum utilization of the available professional nursing staff. With the increased number of non-professional workers, a clear definition of the duties of each group is important but difficult to obtain. One reason for this difficulty is the overlapping of many of the duties of the professional nurse, the practical nurse, and the nurse's aide.

This study is carried out to determine how nursing service personnel function and how their time is divided between those activities considered direct care and those considered indirect care. Is the time spent away from the patient devoted to duties related to his care or to non-nursing functions? Another question to be answered is, are the nursing service personnel functioning at their own level? Data for this study were obtained by the use of the work-sampling technique of observation of the

activities performed by the nursing personnel on one selected medical and one selected surgical unit for a period of five consecutive days in each unit.

Setting

The hospital selected for this study is a privately-owned general medical-surgical hospital with a capacity of 329 patients. The hospital is fully accredited by the Joint Commission on Accreditation of Hospitals. It is a member of the Catholic Hospital Association, American Hospital Association, Association of Western Hospitals, Oregon Association of Hospitals, Blue Cross, and the Oregon Conference of Catholic Hospitals. The medical staff serving the hospital is made up of 322 physicians, 40 per cent of whom are members of the teaching staff of the University of Oregon Medical School and 60 per cent are Board Certified in their individual specialties. Because of the small number of internes and residents available, the Medical Staff Executive Committee has a member on call, in the hospital, every 24 hours to handle emergency situations that would ordinarily be the duties of the internes and residents. The medical unit selected for this study had no interne or resident. The selected surgical unit had a surgical resident.

The hospital is made up of the following departments or units; three medical units, two surgical units, one orthopedic, one urology, and one pediatric unit. The medical unit selected for this study consists of four 5-bed wards, one 3-bed ward, two 2-bed wards, and six private rooms. Each ward and private room has running water and the utility room is located mid-way in the unit. The nurse's station is located at the junction of the row of six private rooms and the two and three-bed units. The medicine and treatment room is adjacent to the nurse's station. The pharmacy needs of the department are delivered to the floor by means of a dumb-waiter with the exception of narcotics which must be secured by a professional nurse. The linen supply for the unit is in the care of the Housekeeping Department and is delivered by the housekeeping personnel. Extra linen is stored in a cupboard adjacent to the nurse's station. There are no dietary aides for the care of the patients' tray; this is the responsibility of the nursing service personnel. Nourishments are delivered twice a day to the individual units and these are passed by the clerk or by the nurses. The Central Supply service provides all the sterile and unsterile equipment needed by the unit. Maids care for the housekeeping in the wards and private rooms and a janitor is available to do the heavy cleaning.

The surgical unit selected for this study is similar in physical make-up to the selected medical unit with the exception of an additional wing of four private rooms. The daily capacity of the surgical unit is 36 patients.

A review of the categories of nursing personnel and their various duties on each unit will render a clearer understanding of the unit situation. The description of the duties which follow are based on the Hospital Policy and Procedure Book.⁽³⁸⁾

The Nursing Service is under the direction of the Director of Nursing Service and two Assistant Nursing Service Directors. They are responsible for all matters of concern to the nursing service of the hospital. In addition to the director and her two assistants are two Teacher-Supervisors. As it became necessary to replace professional nurses with non-professional workers, it was recognized by the administration in nursing service that closer supervision of non-professional staff was necessary. One Teacher-Supervisor is in charge of the student practical nurse program; the other is in charge of the aides and orderlies. They work with their groups on the units and conduct the monthly in-service programs.

The supervision of the units within the hospital is carried out by Sister Supervisors. The limited number of Sister Supervisors necessitates the management of two or more units by one Sister Supervisor.

The head nurse is responsible for the nursing service in one unit. Her administrative duties are those of providing adequate nursing care of the patients for a 24-hour period; identifying nursing and nursing service problems; orienting new personnel; assisting in the scheduling of vacations; evaluating quality of service given by personnel; and maintaining a comfortable, orderly, clean, and safe environment for patients and personnel. (38)

The professional staff nurses function according to the standards set down in the American Nurses' Association Functions, Standards, and Qualifications of the General Duty Nurse. (38) A revision of the duties of the professional staff nurse is in the process of being reduced to writing and hence was not available at the time of this study.

The practical nurses, aides, orderlies, and student practical nurses function under the direction of the head nurse. Their duties are outlined according to the unit routine of patient care.

For example, between 7:00 am. and 7:30 am. the following activities are carried out:

1. Check assignment, morning report, check Kardex and/or treatment cards, and plan care.
2. T.P.R. and chart on "temp. board" stat.
3. Check with patient regarding last bowel movement.
4. Wash patient's hands and face for breakfast tray.
5. Oral hygiene.
6. Pass a glass of fresh water.
7. Prepare patient for breakfast tray.
8. If possible give a complete morning care on those floors where trays come late.
9. Answer lights promptly.

The remainder of the day is outlined according to the activities to be performed.

The ward clerk, under the direction of the head nurse, assists by relieving the head nurse of clerical and other non-professional duties. Her primary objective is to provide desk work assistance so the head nurse can give more time to the administrative activities of her unit, make rounds with the doctors, and visit the patients more frequently.

The student nurses present on the units during the study were senior students on their "senior elective" rotation. They functioned as medicine nurses and as assistants to the head nurse. These seniors were from the hospital's school of nursing which is terminating in September, 1962. The students worked independently but under the direction of the head nurse. A clinical instructor visited the units daily to confer with the head nurse regarding any problem that might arise, but no actual instruction or supervision of students was given by the clinical instructor on the units.

Though the normal staffing pattern for the two selected units varied from week to week, a general idea of the staffing plan can be gained by reviewing the number of persons assigned to each unit. The medical unit staff was made up of a head nurse, four professional nurses, two professional nursing students, two licensed practical nurses, one nurse aide, and a ward clerk. One of the professional staff nurses was assigned to the preparation and administration of medicines.

During the period of this study the nursing care hours provided each patient per day varied from 4.3 hours to 5.2 hours averaging 4.7 hours per day. This was higher than the 3.2 nursing

care hours per patient per day recommended by the American Hospital Association and The National League of Nursing Education in 1942. ⁽¹⁾ The census averaged 29 patients during this study. A comparison of the nursing care hours per patient was made with the other medical units at the time of the study and comparable data were revealed. The average number of nursing care hours per patient the month previous to the study was 4.5 hours with a census of 29 patients. These hours of available nursing care are higher than the recommendations of 1942, but it must be considered that the 1942 study did not include such a wide variety of nursing personnel as now staff a unit.

The surgical unit nursing staff was made up of a head nurse, four professional nurses, two professional nursing students, three practical nurses, two nurses' aides, and a ward clerk. The nursing care hours per patient per day varied from 4.0 to 4.8 averaging 4.5 hours per day. The census averaged 30 patients. A review of the nursing care hours per patient for the month previous to the study revealed variations from 4.0 to 5.5 averaging 4.5 hours per day per patient. The census fluctuated between 28 and 35 patients averaging 29 patients. It was apparent from this review that the amount of nursing care provided each patient

every day at the time of the study was comparable to that customarily found on the units.

The head nurse of the surgical unit used a modified case assignment method for the distribution of her nursing personnel time. Whenever possible the critically ill patients were assigned to the professional staff nurses. When this was not feasible, the patient was assigned to the most experienced and reliable practical nurse. The head nurse of the medical unit, however, used assignment by wards rather than by individuals.

When illness or days off decreased the staff, replacements were obtained from a pool of professional and practical nurses. The Nursing Service Division was responsible for providing the relief nurse.

Procedure

This study was carried out according to the plan outlined in Chapter I. The necessary administrative permission was granted by the Administrator of the hospital as well as by the Director of Nursing Service. (See correspondence in Appendix A.)

An explanation of the design and purpose of the study was made to the director of nursing service and her two assistants. A conference was held with the head nurse of the medical unit selected for study and she expressed her interest and willingness to cooperate with the observer. The plan was further explained to the nursing service personnel of the medical unit the morning of the trial observation.

The trial observation was carried out the week before the actual study. Eight hours of intermittent, instantaneous observations were done to; (1) acquaint the subjects with the observer and to accustom them to her presence on the unit; (2) to enable the observer to work with the tool and make the necessary adjustments; and (3) to enable the observer to develop skill in the recording of the various activities observed.

The method used for the recording of the observations had been patterned after that suggested in How to Study Nursing Activities in a Patient Unit. (30) The form used in this study was adapted to allow two observation periods to be included on one sheet of paper. (See Appendix B) The levels of activity and the code from the aforementioned publication were also used. They may be defined as follows:

<u>Code</u>	<u>Definition</u>
Hn	<u>Head Nurse</u> activities involve: planning, evaluating, coordinating, reviewing, and making decisions concerning nursing care in the unit. This includes giving nursing care in emergency situations. Giving nursing care in order to have opportunity to observe patients, to establish rapport with the patients, or to teach nursing staff.
Rn	<u>Professional staff nurse</u> activities are those that require some professional nursing skill. Any nursing procedure a professional nurse performs in the presence of a patient, no matter how elementary it seems, will be classified as <u>Rn</u> level.

The reason for not distinguishing nursing levels in activities performed at the patient's bedside is that unless a nurse is observed continuously it is often difficult to determine the real skill requirements of an activity. With intermittent observations, a professional nurse might be observed straightening a patient's pillow, a simple activity that could be performed by a nursing aide. However, a moment before this she might have been changing a dressing, and then have straightened the pillow to make the patient comfortable after the dressing procedure.

Activities away from the patient's bedside will be classified according to level of nursing skill re-

quired.

Preparing medications will be coded as Rn.

Pn Practical Nurse level refers to all activities included in the job description of the practical nurse that exists in the individual hospitals.

Na Nurse Aide or orderlies level refers to all activities that are included in the job descriptions of this group. Nursing activities performed by nursing aides or orderlies in the presence of the patient are coded on the nursing aide level unless the nursing aide or orderly is doing an activity she is not permitted to do.

Cl Clerical level activities include: copying records, as nursing time sheets. Maintaining graphic records. Assembling chart forms on patient's admission. Filling in chart headings and checking charts on discharge. Making out requisitions for specimens, laboratory services, X-rays, or other professional services. Coordinating professional services in a department or between departments.

These duties will be considered clerical, whether or not a clerk is on the unit when they are performed, and regardless of who performs them.

Patient Care

Code

Definition

Codes 11 and 12 will be used only when the person observed is actually with patients.

11 "Patient: Giving Care" includes:

Assisting doctors with treatments or procedures.
Carrying out a nursing procedure for a patient.

12 "Patient: Other Direct Activities" means all activities in the patient's presence that are not a part of those classified as "Patient: Giving Care."

It includes:

Evaluation of patient's need for care.

Informative conversation or exchange of pleasantries with the patient.

Listening to request, wishes, and complaints of patients and making interpretations.

Observing physical condition and behavior of patients.

Teaching patients. All other activities in patient's presence not considered as nursing care.

13 "Patient: Exchange of Information about Patient" includes:

Exchanging verbal reports about a specific patient or patients with unit personnel, nursing service administration, physicians, other hospital departments, patient's family and friends, and other interested persons or agencies.

Listening to or giving a.m. or p.m. report.

Receiving or giving an assignment relating to patient care.

Discussing an assignment of patient care.

Telephoning other departments about scheduling patients' appointments.

Ordering drugs, supplies, or equipment by telephone for a specific patient or patients.

Reporting on and off duty.

14 "Patient: Indirect Care" means all other patient-centered activities not in the presence of the patient and not involving an exchange of information about a patient. It includes:

Care of records and record forms relating to patient care.

Charting of care given.

Checking of doctors' orders.

Errands for patients.

Preparation of treatment trays.

Setting up and terminal care of equipment.

15 "Patient: Indirect Care" - Preparation of medications.

21 "Personnel: In-service Development of Staff" refers to participation in all activities conducive to improved nursing service and unit management. It includes:

Conversations with unit personnel, physicians, and personnel of other departments, to maintain favorable rapport and good interpersonal relationships.

Demonstrations.

Giving and receiving planned or impromptu teaching.

Staff meetings attended by personnel.

Making personnel records and conferring about personnel matters.

Observing and evaluating quality of work.

Errands in search of unit personnel.

Unit Management

30 This classification includes:

Housekeeping, maintenance of cleanliness, order, and safety on the unit.

Obtaining required supplies and equipment and all discussions and exchanges of information regarding these activities.

Interpreting a hospital policy or procedure to persons other than unit staff or patients. Example: Explaining hospital regulations to visitors.

Serving on committees for the purpose of discussing, revising, or formulating hospital and nursing policy and procedure.

Activities related to this study.

Discussions, compilation of data, and so forth, for other research studies.

Personal and Unoccupied

00 This classification includes:

All activities that are personal, such as conversation about personal affairs, and coffee time.

Time when an individual is unoccupied and no unit purpose can be identified.

During the trial observation period it was found necessary to make brief explanations of the study to the patients. This was deemed essential as the patients tended to think that the observer was there to evaluate the nursing care being given. Following the explanation, the patients cooperated with and encouraged the

observer in her study.

During the actual study, observations were made every fifteen minutes during the hours of 7:00 am. to 12 noon and 12:30 pm. to 3:30 pm. On each unit studied the observation series were started at a slightly different time. For example: Monday's observations started at 7:00 am. and the later series of observation started at 7:15 am., 7:30 am., 7:45 am., and the like and continued at 15 minute intervals. On Tuesday, observations were started at 7:05 and continued at 7:20 am., 7:35 am., 7:50 am., and so forth. Wednesday's observations started at 7:10 am. Thursday and Friday the observations returned to the pattern of Monday and Tuesday.

On the first observation, the observer started with the first person seen, identified what the person was doing in terms of the area of activity and the level of activity and recorded it on the recorder's sheet using the necessary codes and numbers. When more than one person in each nurse category was observed, each person was identified according to her level and a subscript was placed after the abbreviation. For example, Rn₁ and Rn₂ were recorded for each of the professional nurses observed. The other levels of nursing personnel were recorded in the same manner.

The investigator proceeded from the first person observed to the remaining personnel as she came upon them in her tour through the unit. All the personnel assigned to the unit were observed during the fifteen minute observation period. A different place in the unit was selected for the start of each series of observation and the pattern of observations was repeated.

When the subjects were involved in two or more activities at the same time, for example, giving a treatment and talking with the patient are not in the same activity area; the observer arbitrarily determined which activity was primary and which was secondary. The observation was classified by its apparent importance. If the exact reason could not be determined by the observer, the subject was asked to assist in defining her activity.

Time in travel was not recorded separately. It was recorded on the basis of the activity being carried out. Similarly, hand-washing was not classified. It was considered part of the procedure completed or to be initiated.

The activities in which students were involved were weighed carefully in terms of whether they were patient-centered or student-centered. For example, students' rounds with doctors were generally

coded as 22, because this activity was probably more student-centered than patient-centered.

The second week of observation was made on the surgical unit. On the first morning of the five-day observation period, an explanation of the study was given to the nursing personnel on duty. The head nurse's willingness to assist the observer had been given during the previous week. At the completion of the two five-day observation periods the tabulations from the observation sheets were transcribed to worktables from which the following findings were made:

(Page 60)

TABLE I

**TOTAL NUMBER OF HOURS NURSING SERVICE PERSONNEL
SPENT WITH PATIENTS AND AWAY FROM PATIENTS,
BY ACTIVITY AREA, ON A SELECTED MEDICAL
UNIT FROM 7:00 AM. TO 3:30 PM. FOR FIVE
CONSECUTIVE DAYS**

Areas of Activities	Hours			
	Head Nurse	Prof. Staff Nurse	Prof. Stud. Nurse	Other Nursing Personnel
Total, all activities . . .	38.9	95.9	59.8	139.9
<u>Activities with patients</u> . . .	3.8	36.3	6.0	68.2
11. Giving care	1.5	21.8	3.0	36.1
12. Other direct activities	2.3	14.5	3.0	32.1
<u>Activities away from patients</u>	30.1	43.0	30.3	69.2
13. Exchange of information	20.0	8.0	7.3	12.0
14. Indirect care	3.5	17.6	13.0	29.3
30. Unit management	2.8	2.3	2.0	6.0
00. Personal and unoccupied	3.8	15.1	8.0	21.9
<u>Activities sometimes with, and sometimes away from patients</u>	5.0	16.6	23.5	2.5
15. Preparation and administration of medicines		16.6	20.0	
21. In-service development	3.5		2.5	2.5
22. Student education program	1.5		1.0	

Presentation and Interpretation of Data

Table I indicates the distribution of the available nursing care hours among the various levels of nursing service personnel. During the forty hours of head nurse's time 3.8 hours were spent with the patient. Activities with the patient on the head nurse level include rounds with the doctor and the head nurse's own evaluation of the patients on her unit.

Activities away from the patient took 30.1 hours. Area 13, which is the exchange of information, consumed 20 hours or 50 per cent of her time. Area 14, which covered the area of patients' charts, records, and necessary requisitions for laboratory work and supplies, took 3.5 hours a week. Unit management, area 30, consumed 2.5 hours. The head nurse was responsible for ordering delayed or special diets for the patients on her unit. The head nurse was often approached by visitors seeking information about patients or clarification of hospital policy as to the hours visitors were allowed on the unit.

Activities sometimes with and sometimes away from the patient consumed 5.0 hours. In-service development, area 21, took 3.5 hours per week. The head nurses' meeting was held

during the week of this study on the medical unit. Also included in area 21 is the planning of the hours and days off of the personnel. Area 22, student education program took 1.5 hours a week or approximately 18 minutes a day. As was stated previously, the senior student worked, for the majority of her time, independently. Questions that arose were those of which form to use when making out a special request, or how certain laboratory procedures were handled on this unit.

The available professional nursing care time totalled 96 hours for the period of five days. Activity with the patients, area 11 and 12 consumed 36.3 hours a week or 6.3 hours per day.

Activities away from the patients, area 13 and 14, consumed 43 hours a week. In these two categories are nursing activities such as the charting of care, treatments, and the recording of vital signs; checking the Kardex for new orders for treatments; setting up equipment to be used in the care of the patient. All nursing personnel were asked to have the morning T.P.R.'s on the "temp. board" before 8:00 am. each morning as well as pertinent information that could be needed by the doctors. The nurses, of necessity, had to chart their care and observations several times during the morning as well as in the afternoon.

Unit management, activity area 30, took 2.3 hours per week. This time was spent as part of the complete care of the patient. For example, nursing personnel on all levels were responsible for the neatness of their wards. This meant the disposal of soiled linen, cleaning of used equipment, and the straightening of the wards.

Activities sometimes with and sometimes away from the patient included area 15 which is the administration and preparation of medications. This activity took 16.6 hours a week. The charting for and requisitioning of medications were included in category 14. There was no in-service program for the professional nursing staff during the week of observation.

The professional student nurses were assigned for a total of 60 hours of nursing care during the week of observation. As senior students one was assigned to the role of medicine nurse and the other assisted the head nurse in the administration of the unit.

Activities with the patient, area 11 and 12, consumed 6.0 hours a week. Activities away from the patient accounted for 30.3 hours of the total 60 hours. In this group of activities, category 13, the exchange of information, used 7-3 hours. The stu-

dent assisting the head nurse often answered the telephone giving information to other departments as well as to the doctors who called inquiring about their patients. Due to the absence of a medical resident or interne, the head nurse and the student assisting her often had to call the doctors' offices to relay pertinent information to them so further treatment might be instigated or the present one continued. Unit management took 2.3 hours a week while personal and unoccupied consumed 8 hours.

Activities sometimes with and sometimes away from the patient consumed 23.5 hours of the week. In this group was area 15, the preparation and administration of medications, which took 20 hours or one-third of the available time. Area 21, in-service program, accounted for 2.5 hours. The senior student, as assistant head nurse, attended the head nurse meeting and helped in the preparation of personnel hours. One hour a week was spent in area 22, the student education program.

Other nursing personnel included the practical nurses and the nurse aides. Area 11 and 12 which took place with the patients used 68.2 of the available 140 hours of nursing care hours.

Activities away from the patient consumed 69.2 hours. Area 13, the exchange of information, used 12.0 hours. This time

was spent in conferences with the head nurse about the care to be given to the patients or some request made by the patient which was passed along by the nurse. The time spent at the morning report fell into area 13. Charting consumed the major amount of time spent in area 14. The ward routine made it mandatory that some charting be done early in the day. Before the nursing personnel went for a coffee break or for lunch all pertinent information had to be made known to the head nurse and placed on the chart. Unit management used 6.0 hours per week, and personal and unoccupied consumed 21.9 hours of the total 140 hours.

Activities sometimes with, and sometimes away from the patient accounted for 2.5 hours. Area 21, in-service development consumed this time. The practical nurses had their monthly in-service program during the week of observation.

TABLE II

TOTAL NUMBER OF HOURS NURSING SERVICE PERSONNEL SPENT WITH PATIENTS AND AWAY FROM PATIENTS, BY ACTIVITY AREA, ON A SELECTED SURGICAL UNIT FROM 7:00 AM. TO 3:30 PM. FOR FIVE CONSECUTIVE DAYS

Areas of Activities	Hours			
	Head Nurse	Prof. Staff Nurse	Prof. Stud. Nurse	Other Nursing Personnel
Total, all activities . . .	39.1	104.0	39.7	173.6
<u>Activities with patients</u> . . .	5.0	41.1	6.0	91.6
11. Giving care	1.5	25.8	0.5	59.1
12. Other direct activities	3.5	15.3	5.5	32.5
<u>Activities away from patients</u>	29.3	49.6	19.6	79.2
13. Exchange of information	15.8	9.0	6.3	17.3
14. Indirect care	8.0	22.3	6.8	39.8
30. Unit management	2.3	4.3	1.5	3.6
00. Personal and unoccupied	3.2	14.0	5.0	18.0
<u>Activities sometimes with, and sometimes away from patients</u>	4.8	13.3	14.1	2.8
15. Preparation and administration of medicines		12.3	13.8	
21. In-service development	4.5	0.5	0.3	2.8
22. Student education program	0.3	0.5		

Table II represents the distribution of nursing time by the various levels of nursing personnel in the activity areas on the selected surgical unit. The activity areas are placed into three groups: (1) activities with the patient, (2) activities away from the patient, and (3) activities sometimes with, and sometimes away from the patient.

Activities in the presence of the patient, area 11 and 12 consumed five hours a week of the head nurse's time. In these areas were the daily rounds by the head nurse in which she discussed with the patients their progress and the state of their well-being. Rounds with the doctors fall into this group.

Activities away from the patient accounted for 29.3 hours of the head nurse's time. Area 13, the exchange of information, consumed 15.8 hours a week. In this area the time was spent in discussions with the doctors, telephone conversations with various departments, relaying information to the doctors via the telephone, and for the "stat" laboratory or medication orders. Area 14, indirect care, consumed 8.0 hours per week. The head nurse checked the patients' charts several times a day as it was not possible for her to talk individually with each of the doctors who left orders for their patients. In the selected surgical units, the

absence of an interne made it necessary for the head nurse to make certain that the "pre-operative work-up" was completed before the patient was sent to surgery. Unit management used 2.3 hours. This time was spent in the maintenance of a smooth-running unit. Area 00, personal and unoccupied used 3.2 hours per week.

Activities sometimes with, and sometimes away from the patient consumed 4.8 hours per week. In this was area 21, in-service development. This included time spent at a head nurse meeting and personnel hours. During the week of this study the head nurse on the selected surgical unit was making up the vacation schedule for the nursing personnel on her unit and a conference was held with the Director of Nursing Service about a problem that arose when the schedule was drawn up.

The professional nurse staff varied from day to day because of days off and averaged three professional nurses per day. Activities with the patient consumed 41.1 hours of the available 104 hours of professional nursing care time. Area 11 took 25.8 hours and area 12 took 15.3 hours per week.

Activities away from the patient took 49.6 hours. In this group of activities, area 13 took 9.0 hours. In this area are the morning reports, conversations with the head nurse about the care

to be given, evaluating the patients' condition with the head nurse and talking with the doctors. Area 14, indirect care, consumed 22.3 hours. Area 30, unit management, accounted for 4.3 hours and personal, area 00, consumed 14 hours.

Activities sometimes with, and sometimes away from patients consumed 13.3 hours. In this group, area 15 accounted for 12.3 hours. One of the responsibilities of the medicine nurse was checking the accuracy of the individual medicine cards on file against the current orders recorded on the unit Kardex. Area 21, in-service development, and area 22, student education program, consumed 0.5 hour each.

Professional student hours totalled forty hours during the observation study. Two senior students were present on the unit; one student was assigned to medicines and the other student nurse was the assistant to the head nurse. These students were attending classes and were on the units only a portion of the day shift.

Activities with the patients consumed 6.0 hours per week. Area 11, accounted for 0.5 hour while area 12 took 5.5 hours. The student nurse as assistant to the head nurse made patients' rounds with the head nurse and spent time evaluating the patients' condition.

Activities away from the patient consumed 19.6 hours of the total 40 hours. Area 13, the exchange of information, took 6.3 hours. The student in her position as assistant to the head nurse communicated with the various departments in the hospital, the doctors, and the families of the patients. Area 14, indirect care, accounted for 6.8 hours. This presented the charting of medications, the writing of requisition slips, checking doctors' orders, checking the charts for completeness and accuracy, and the transcribing of orders from the patients' charts to the Kardex. Unit management took 4.3 hours. Activities within this area are supplies for the unit, ordering necessary repairs, and the maintenance of a clean and supplied medicine room. Area 00, personal and unoccupied, used 5.0 hours.

Activities sometimes with, and sometimes away from the patient used 14.1 hours. The majority of time consumed was in area 15, the preparation and administration of medication, 13.8 hours. Area 21, in-service development, used 0.3 hour.

Other nursing personnel, 173.6 hours per week, represents the hours of nursing care contributed by the licensed practical nurses and the nurse aides. The average number of non-professional workers on the surgical unit was four for the week of this study.

Activities with the patient consumed 91.6 hours.

Area 11, giving care to the patient, took 59.1 hours per week; and area 12 accounted for 32.5 hours. Activities away from the patient, 79.2 hours a week, were carried out in support of direct patient care. As had been noted, nursing personnel were responsible for all treatments of assigned patients and the time spent in the preparation of and clean-up following treatment falls into area 14.

Area 13, exchange of information, consumed 17.8 hours per week. A significant finding in this area was the non-professional workers needed more guidance of their activities than did the professional workers. The licensed practical nurses and the nurse aides sought help from the head nurse on numerous occasions. Unit management, area 30, took 3.6 hours per week. These activities were part of the complete care of the patients.

Activities, sometimes with, and sometimes away from the patient used 2.8 hours. This time was spent in area 21. The nurse aides of the selected surgical unit had their in-service program the week of the observation study.

The findings in Table I and Table II showed that in the three major divisions: (1) activities with patients, (2) activities away from the patients, and (3) activities sometimes with, and sometimes away from the patients; the selected medical and selected surgical unit presented comparable data. For this reason the two selected units were combined into one group and the following tables developed:

TABLE III
PERCENT OF TIME HEAD NURSE
SPENT ON EACH AREA AND
LEVEL OF ACTIVITIES

Areas of Activities	Levels of Activities						
	Total All Levels	Hn	Rn	Pn	Na	Stud	Cl
Total, all areas. . .	100.0	89.2	5.4	1.2	1.4		2.8
<u>Patient</u>	70.0	60.6	5.4	0.6	0.7		1.7
11. Giving care . .	2.7	2.4	0.3				
12. Other direct care	7.4	4.7	1.7	0.3	0.7		
13. Exchange of information	40.7	39.3	0.7				0.7
14. Indirect care . . .	19.2	14.2	2.7	0.3			1.0
<u>Personnel</u>	13.5	12.8					0.6
21. In-service development	10.8	10.1					0.6
22. Student education program	2.7	2.7					
<u>Unit</u>	6.8	6.1					0.5
30. Housekeeping, etc.	6.8	6.1					0.5
<u>Personal</u>	9.7	9.7					
00	9.7	9.7					

TABLE IV
 AMOUNT OF TIME HEAD NURSE
 SPENT ON EACH AREA AND
 LEVEL OF ACTIVITIES

Areas of Activities	Levels of activities						
	Total All Levels	Hn	Rn	Pn	Na	Stud	CI
Total, all areas	40.0	36.2	2.2	0.2	0.3		1.1
<u>Patient</u>	28.2	24.4	2.2	0.2	0.3		0.1
11. Giving care	1.1	1.0	0.1				
12. Other direct care	3.0	1.9	0.7	0.1			0.3
13. Exchange of information	16.4	15.7	0.3				
14. Indirect care	7.7	5.7	1.1	0.1			0.7
<u>Personnel</u>	5.1	5.1					
21. In-service development	4.0	4.0					
22. Student education program	1.1	1.1					
<u>Unit</u>	2.4	2.4					
30. Housekeeping, etc.	2.4	2.4					
<u>Personal</u>	4.3	4.3					
00.	4.3	4.3					

Table III and IV show a breakdown of: (1) the per cent of time the head nurse spent on each area and level of activities; and (2) the amount of time the head nurse spent in the activities in each area and level; 89.2 per cent or 36.2 hours of the week were devoted to activities that were considered, in this hospital, as head nurse activities.

At the professional staff nurse level, the head nurse spent 5.4 per cent or 2.2 hours per week. These activities were instances where the head nurse saw a need and fulfilled the need. For example, the head nurse would give a patient a headache medication if the medicine nurse were busy; or write out a requisition slip for needed equipment if the clerk was off the unit or busy with clerical work.

The head nurse spent 1.2 per cent or 0.4 hour at the practical nurse level and 1.4 per cent of the total time or 0.3 hour at the nurse aide level. The activities at levels other than the head nurse's were usually performed to maintain the smooth functioning of the unit. Should the head nurse find a pertinent need she would fulfill it rather than wait to direct another nursing service person to perform.

TABLE V

PERCENT OF TIME PROFESSIONAL NURSE
SPENT ON EACH AREA AND LEVEL
OF ACTIVITIES

Areas of Activities	Levels of activities						
	Total All Levels	Hn	Rn	Pn	Na	Stud	CI
Total, all areas	100.0		96.8		2.2		1.0
<u>Patient</u>	80.1		77.4		2.2		0.5
11. Giving care . . .	22.9		22.8				0.1
12. Other direct care	14.5		13.4		1.0		0.1
13. Exchange of information	9.5		8.2				0.1
14. Indirect care . . .	19.1		17.8		1.2		0.1
15. Preparation and administration of medicines	14.1		14.0				0.1
<u>Personnel</u>	0.4		0.4				
21. In-service development	0.2		0.2				
22. Student education program	0.2		0.2				
<u>Unit</u>	3.3		2.8				0.5
30. Housekeeping, etc.	3.3		2.8				0.5
<u>Personal</u>	16.2		16.2				
00.	16.2		16.2				

TABLE VI

AMOUNT OF TIME PROFESSIONAL NURSE
SPENT ON EACH AREA AND
LEVEL OF ACTIVITIES

Areas of Activities	Levels of activities						
	Total All Levels	Hn	Rn	Pn	Na	Stud	CI
Total, all areas	40.0		38.7		0.9		0.4
<u>Patient</u>	32.6		31.5		0.9		0.3
11. Giving care	9.2		9.1				0.05
12. Other direct care	5.9		5.4		0.4		0.05
13. Exchange of information	3.4		3.4				
14. Indirect care	8.4		7.8		0.5		0.05
15. Preparation and administration of medicines	5.7		5.6				0.05
<u>Personnel</u>	0.2		0.2				
21. In-service development08		.08				
22. Student education program08		.08				
<u>Unit</u>	1.1		1.1				0.02
30. Housekeeping, etc.	1.1		1.1				0.02
<u>Personal</u>	6.1		6.1				
00	6.1		6.1				

Table V shows a detailed breakdown of the percentage of time the professional nurse spent in patient care, personnel activities, unit management, and personal time. Table VI is a breakdown of the hours spent in these areas. Activities concerned with the patient accounted for 77.4 per cent or 31.3 hours of the week.

The findings show that the professional nursing staff functioned at their own level 96.8 per cent of the time.

Tables VII, VIII, IX, and X, pages 79, 80, 81, and 82, present the percentage and time spent by the practical nurses and nurse aides. They functioned at their own level 98.4 per cent for practical nurses, and 99.0 per cent for the nurse aides. The few occasions when they were observed functioning at other levels were; for example, the nurse aide assisting the doctor with a sterile dressing change, and the practical nurse evaluating the condition of a critically ill patient.

No analytical table was prepared for the clerk as she performed tasks within her defined position 98.5 per cent of the time.

TABLE VII
 PERCENT OF TIME THE PRACTICAL NURSES
 SPENT ON EACH AREA AND
 LEVEL OF ACTIVITIES

Areas of Activities	Levels of activities						
	Total All Levels	Hn	Rn	Pn	Na	Stud	Cl
Total, all areas	100.0		1.0	98.4	0.3		0.3
<u>Patient</u>	74.0		0.5	73.0	0.3		0.3
11. Giving care . . .	30.3		0.5	29.8			
12. Other direct care	17.0			16.7	0.3		
13. Exchange of information	6.1			6.1			
14. Indirect care . .	20.6			20.3			0.3
<u>Personnel</u>	1.8			1.8			
21. In-service development	1.8			1.8			
22. Student education program							
<u>Unit</u>	3.6			3.6			
30. Housekeeping, etc.	3.6			3.6			
<u>Personal</u>	20.0			20.0			
00.	20.0			20.0			

TABLE VIII

AMOUNT OF TIME THE PRACTICAL NURSES
SPENT ON EACH AREA AND
LEVEL OF ACTIVITIES

Areas of Activities	Levels of activities						
	Total All Levels	Hn	Rn	Pn	Na	Stud	Cl
Total, all areas . . .	40.0		0.2	39.6			0.2
<u>Patient</u>	29.7		0.2	29.3			0.2
11. Giving care. . .	12.1		0.2	11.9			
12. Other direct care	6.8			6.7	0.1		
13. Exchange of information	1.6			1.6			
14. Indirect care . .	8.2			8.0			0.2
<u>Personnel</u>	0.5			0.5			
21. In-service development	0.5			0.5			
22. Student education program							
<u>Unit</u>	1.5			1.5			
30. Housekeeping, etc.	1.5			1.5			
<u>Personal</u>	8.3			8.3			
00.	8.3			8.3			

TABLE IX

PERCENT OF TIME THE NURSE AIDES
SPENT ON EACH AREA AND
LEVEL OF ACTIVITIES

Areas of Activities	Levels of activities						
	Total All Levels	Hn	Rn	Pn	Na	Stud	CI
Total, all areas	100.0		1.0		99.0		
<u>Patient</u>	84.1		1.0		83.1		
11. Giving care	28.6		0.5		28.1		
12. Other direct care	22.9				22.9		
13. Exchange of information	8.8				8.8		
14. Indirect care	23.8		0.5		23.3		
15. Preparation and administration of medicine							
<u>Personnel</u>	1.0				1.0		
21. In-service development	1.0				1.0		
22. Student education program							
<u>Unit</u>	2.6				2.6		
30. Housekeeping, etc.	2.6				2.6		
<u>Personal</u>	12.3				12.3		
00.	-12.3				12.3		

TABLE X
 AMOUNT OF TIME THE NURSE AIDES
 SPENT ON EACH AREA AND
 LEVEL OF ACTIVITIES

Areas of Activities	Levels of activities						
	Total All Levels	Hn	Rn	Pn	Na	Stud	CI
Total, all areas.	40.0		0.3		39.6		0.1
<u>Patient</u>	34.5		0.3		34.2		
11. Giving care	14.2		0.2		14.2		
12. Other direct care	8.3		0.1		8.2		
13. Exchange of information	3.5				3.5		
14. Indirect care	8.3				8.3		
15. Preparation and administration of medicines							
<u>Personnel</u>	0.4				0.4		
21. In-service development	0.4				0.4		
22. Student education program							
<u>Unit</u>	1.0				1.0		
30. Housekeeping, etc.	1.0				1.0		
<u>Personal</u>	4.4				4.4		
00.	4.4				4.4		

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study of the activities of nursing personnel in one selected medical and one selected surgical unit had a three-fold purpose: (1) to determine how nursing personnel function; (2) to determine how much nursing time was spent with the patients and away from the patients; and (3) to determine whether or not nursing personnel function at their own level.

The hospital and units for the study were selected. Administrative permission was granted to carry out the study. The work-sampling technique of observation, categories, and activity areas were adapted from How to Study Nursing Activities in a Patient Unit prepared by the Division of Nursing Resources of the Public Health Service, U.S. Department of Health, Education, and Welfare. (30)

The researcher carried out a trial observation period of eight hours for the purpose of gaining skill in recording and testing the form designed for recording observations. An explanation of the study was made at this time to the subjects of the study.

During the actual study, intermittent, instantaneous observations were recorded every fifteen minutes for five consecutive

days in each of the selected units. The data were tabulated and presented in Chapter III of this study.

Data may be summarized as follows:

1. The head nurse spent 29.3 to 30.1 hours of a forty hour week away from the patient. In these activities, the major portion of time was spent in the exchange of information about the patients and their care with various departments, nursing personnel, and doctors.
2. The professional nurses spent approximately the same amount of time in activities with the patient as in activities away from the patient. The time spent away from the patient was in support of the activities with the patient. Very little time was spent on non-nursing activities.
3. The non-professional nurses, like the professional nurses, spent their time in direct and indirect care.

4. Very little time was spent by personnel in the performance of activities apart from their own responsibilities. A few exceptions were:
- (1) the head nurse giving a pain medication;
 - (2) the nurse aide assisting the doctor; and
 - (3) the medicine nurse writing requisition slips for unit supplies.

Conclusions

The purposes of this study were fulfilled in that the data have been obtained to identify (1) the activities of nursing personnel, (2) how they spend their time with and away from the patient, and (3) whether they function at their own level or the level of other nursing personnel.

This study was restricted to one selected medical and one selected surgical unit, and it cannot be generalized that these findings would apply to other units in other hospitals. However, from this study it can be concluded that:

1. The head nurse activities in this setting are concerned with the administration of the unit.

2. Activities of nursing personnel are divided into four general areas. One area, patient care both direct and indirect care, accounts for approximately 75 per cent of their time. Personnel, which includes the in-service program absorbs only 1 to 2 per cent of the time. Personal, another general area absorbs 16 to 20 per cent of the time. This finding may indicate the availability of time which might be utilized for individual on-the-job instruction or organized unit conferences on patient care. The fourth general area, unit management, consumed 1 to 2 per cent of the activities and performed by the nursing personnel as part of the care of the patient.
3. Although the findings show that personnel are functioning on their own level, this is largely because the descriptions of responsibilities of each group of personnel in this hospital include the same scope of activities with the exception of administering the unit (head nurse activity)

and the preparation and administration of medications (performed exclusively by professional nurses). With the above noted exceptions, all nursing personnel, regardless of educational background and experience, were observed performing the same nursing functions. In this setting it cannot be concluded that personnel were functioning other than according to their job specifications; it can be concluded, however, that no differentiation of responsibility or activity has been established based on levels of preparation. Professional and non-professional nursing appear to be synonymous in practice.

Recommendations for Further Study

It is recommended that:

1. An analysis of nursing activities be done in another hospital which uses "team nursing" to determine how the skills of the various categories of nursing personnel are utilized.

2. An activity analysis be done on other shifts for the purpose of determining the amount of time spent with the patient and away from the patient. Is the time spent away from the patient devoted to activities related to patient care or to non-nursing duties? Such analysis might be useful in determining whether or not nursing personnel are being utilized to their optimum capacity.
3. A study be conducted to obtain information from each category of personnel to ascertain if they think (or feel) that they are being utilized to the optimum in the field of nursing for which they have been prepared.
4. A study with greater depth than this one to determine if professional nursing personnel are really being utilized effectively, and if non-professional nursing personnel are performing functions which infringe on the practice of professional nursing.

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APPENDIX B

LETTER TO ADMINISTRATOR OF HOSPITAL

6102 N. E. Davis St.
Portland 13, Oregon
February 26, 1962

Administrator
_____ Hospital
Portland, Oregon

Dear _____:

As a graduate student at the University of Oregon School of Nursing I am preparing a study on the activities of nursing personnel in the hospital. The pattern of the study follows the design set up by the United States Public Health Service Manual, How to Study Nursing Activities in a Patient Unit. The study is in partial fulfillment of the requirements for a Masters degree in nursing.

I would appreciate your permission to carry out my observational study in your hospital. In no way will my study interfere with the normal function of the units. Only two units will be involved for a period of eight hours for five consecutive days.

I will contact your office by telephone within a week to find out if this request meets with your approval and that of your Nursing Service Director, _____. Your permission for this study will be greatly appreciated.

A summary of the study will be made available to you, if you desire it.

Sincerely,

(Signed)

Rose Christensen

Mrs. Rose Christensen is a full time graduate student at the University of Oregon School of Nursing. Any assistance you can give her will be greatly appreciated.

Lucile Gregerson
Assistant Professor

Typed by
Shirley M. Fanning