

A DETERMINATION OF THE SOURCES OF INFORMATION OBTAINED  
BY STUDENT NURSES WHILE ASSIGNED TO NURSING PRACTICE  
ON A MEDICAL SERVICE IN A SELECTED GENERAL HOSPITAL

by

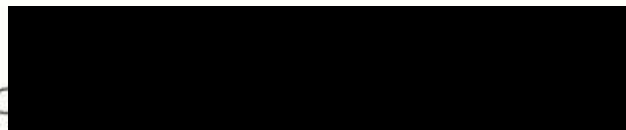
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A THESIS

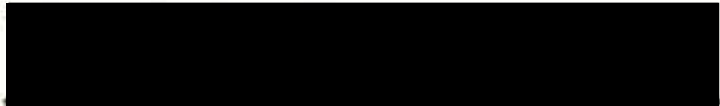
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CHAPTER I  
INTRODUCTION

Background of the Problem

The art and science of nursing cannot be learned entirely in the classroom environment. Both theory and practice are essential components of nursing education. (7) It has been pointed out that the only way to learn to give nursing care to patients is by observation of good nursing and by the actual performance of nursing. (46) The student nurse is assigned to clinical areas in hospitals, out-patient departments, and community health agencies in order to gain knowledge that supplements classroom instruction and to develop the skills essential to competence in the practice of nursing. The clinical nursing assignments are developed in such manner as to assure each student a variety of learning experiences.

When the student begins experience in clinical nursing she is confronted with many new situations. She needs to become oriented to the physical facilities of the patient's environment and to the routines of ward management. She begins to apply principles learned in the classroom in meeting the physical and emotional needs of her patients. In each new assignment she is repeatedly faced with the necessity for adjusting.

Until quite recently, the head nurse had the main responsibility for teaching and supervising the students assigned to a clinical area.

This may have been effective at that time but studies now indicate that because of her many duties, the head nurse can devote only a small proportion of her time to student education. (30,37,39) However, through the maintenance of a proper atmosphere in which the student can observe and learn good nursing and through direct supervision of patient care, the head nurse contributes to student education.

The clinical nursing instructor was first added to the teaching staff of schools of nursing in 1926 largely because head nurses were so burdened with routine and administrative duties that they could not devote adequate attention to the students' needs for orientation, instruction and supervision. (5) Within recent years, the clinical nursing instructor's responsibilities for teaching in the classroom and in the clinical area, for counseling and supervising students, and for fulfilling other duties inherent in a faculty appointment have decreased the amount of time she has available for actual supervision of individual students. The instructor may have students assigned on more than one area. It follows, then, that she is not always available when students need her. Likewise her availability is further limited by the number of students under her direction, by the physical environment of the clinical area, and by the nature of the students' clinical assignments and class schedules. Under those circumstances, the student must either get along without assistance or turn to some person who is available. When the student's particular need is for obtaining information essential for initiating or continuing with a task at hand, it is pertinent that the information be forthcoming promptly.

Obviously the student cannot obtain all needed information from clinical instructors and head nurses. Some kinds of information can be obtained more easily and more appropriately from other sources.

No studies appear to have been made relative to the nature of information sought by student nurses during their practicum in clinical nursing.

#### Statement of the Problem

It is recognized that the student must obtain information concerning the physical environment, the patient's emotional and physical needs, routines, prescribed treatments and modifications of nursing care in order that she may plan and give adequate nursing care to the patients to which she is assigned. Though a portion of this knowledge is included in the context of course instruction, much specific information pertaining to individual patients can be obtained only in the clinical environment.

The following hypotheses have been formulated concerning information obtained by student nurses:

1. The student nurse receives sufficient information in the classroom to enable her to function adequately in the clinical practice area, and
2. The student nurse receives all the needed information from persons primarily responsible for her instruction and supervision.

It is a matter of concern to substantiate or negate these hypotheses by determining what information the student seeks and from



whom it is sought. Therefore, the purposes of this study are:

1. To determine the sources of information sought and obtained by student nurses during their assignment in the selected clinical area.
2. To determine the type of information sought and obtained from the various sources.

#### Limitations

This study is limited to the determination of sources and types of information obtained by student nurses in the clinical area with no attempt to evaluate the quality of such information obtained.

This study is further limited to data that can be obtained by a series of observations made during a period of 60 hours which is the approximate equivalent of two weeks of student clinical experience. The observations are limited to student nurses currently assigned to one selected clinical area in one general hospital between the hours of 7:00 a.m. and 7:00 p.m. on Monday through Friday.

Generalizations can be made only in relation to the situation found during the period of observation and in the selected hospital.

#### Assumptions

It is assumed that:

1. The data obtained by observation will represent an adequate sampling of information received by students in the clinical

area and that the students observed will function in such manner as not to distort the data.

2. The group of students observed in this study is reasonably similar to other groups who are assigned to the medical area within the selected general hospital and that the observations will be fairly representative of those which might be obtained at a different time or from a different group in the same setting.
3. The faculty will function in the usual pattern and will not knowingly contribute more or less information than the students would obtain from them at other times.
4. The staffing and patient census during the period of observation are typical of the usual situation in the medical area selected for this study.

#### Justification

One of the goals of nursing education is to provide each student with adequate learning experiences in clinical nursing. If the student is to receive maximum value from clinical practice, she must be able to obtain adequate information in order to function effectively in her environment.

To expedite the orientation of students to new clinical experiences and to increase the student's capacity for making the daily adjustments necessitated by the complexity of modern nursing, it seems plausible to attempt to identify the nature and sources of information

students seek while on the clinical assignment. It is possible that the findings of such a study could have implications for determining the amount and nature of supervision needed by students, for reorganizing the context of clinical nursing instruction, and for altering the pattern of clinical assignment.

### Definitions

For the purposes of this paper, the following definitions are accepted:

Information - knowledge communicated by others or by personal study and investigation. (22) It includes learning, enlightenment, communication, facts, instruction, guidance, explanation or interpretation. (19)

Nursing unit - a subdivision of the medical department under the administration of a head nurse. (2) It includes a group of accommodations for patient care, a nurses' station, and essential service rooms.

Head nurse - the nurse who is responsible for the administration of the nursing service in a single nursing unit of a clinical division. (10)

Section - a group of patients within a nursing unit assigned to a team of nursing personnel.

Section leader - the nurse who serves as team leader for the nursing personnel assigned to a given section.

Clinical instructor - one who has as her chief responsibility the planning and direction of the instructional program within one clinical area of student experience. (5)

Senior student - a student nurse in her third and last year in the diploma school of nursing.

Junior student - a student nurse in her second year in the diploma school of nursing.

Sophomore collegiate student - a student nurse enrolled in the four-year degree nursing program who has spent one school year on the college campus and at the time of this study had been assigned to clinical practice approximately nine months.

Preclinical student - a nursing student in the first six months in the diploma school of nursing.

#### Sources of Data

Primary data for this study will be secured through a series of observations of student nurses assigned to a medical area of a general hospital. Other data will be obtained from a review of the census of the patient unit, a review of the staffing patterns, review of the average number of nursing hours provided per patient per day, literature, and interview of faculty members.

#### Criteria for Selection of Site for Study

In order to carry out the study in a setting where the environment is conducive to learning good nursing and where the setting is comparable to that utilized by other schools of nursing rather than being unique unto itself, the following criteria were located in the literature and were accepted as the basis for the selection of the site:

1. A voluntary general hospital approved by the Joint Commission on Accreditation of Hospitals and a member of the American Hospital Association. (12,20,21)
2. A school of nursing fully accredited by the National League for Nursing as well as by the legally authorized state accrediting group.
3. A segregated medical department with an active census of patients which provide a variety of disease conditions and wherein all students receive clinical experience. (5,12,20,21)
4. Physical facilities which provide essential space for patients, essential accessory rooms, essential equipment and supplies, and essential provision for educational activities. (12,20,21)
5. Staffing that is adequate to provide for essential nursing care, the average number of nursing hours per patient being at least 3.2. (1,20,21)
6. Good nursing care must be provided to patients. (12,20,21)

#### Plan of the Study

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

1. Select the site which meets the criteria above.
2. Select subjects.
3. Explain the purpose and design of the study to the Director of Nursing and the Director of Nursing Education; secure

their cooperation; obtain administrative clearance for making the study.

4. Secure cooperation of the clinical instructor, department supervisor, and head nurse in the area selected for the study; explain to them the purpose of the study.
5. Procure a list of the nursing students assigned to the selected clinical area and determine the level of experience of each student.
6. Determine if the assignment pattern of students is one that is customary in diploma schools of nursing.
7. Secure the hour schedules for these nursing students.
8. Set up a schedule for the observations which will total 60 hours, the approximate equivalent of two weeks of student clinical experience. Design a pattern for making the observations for one hour periods distributed throughout the hours included in the study. One hour periods will be employed in order to avoid undue strain on the students and also to reduce fatigue in the observer, thus contributing to the accuracy of observations. An equal number of hours of observation will be planned for each educational level represented in the selected clinical area.
9. Set up form for recording data, including code for sources of information and classification of information.
10. Gain the cooperation of the students to be involved in the study. Explain to them that the study is being undertaken

in an attempt to identify the activities engaged in by students at different educational levels.

11. Do a trial observation of three to four hours to gain skill in recording observations.
12. Analyze the data obtained from this sample period of observation.
13. Make any necessary changes in the form for recording data or in the schedule for observations.
14. Observe the activities of the student nurses according to the prepared schedules, recording the data on the form devised for the purpose.
15. Analyze the data according to source and category of information obtained by the students. The frequency with which information of different categories is obtained will be noted as well as the frequency with which information is sought from various sources. Differences in information obtained by students at different educational levels will be pointed out.
16. Tabulate the data.
17. Summarize, draw conclusions, and make recommendations if any.

#### Presentation of the Study

The report of the study will be organized into four chapters.

Chapter I, Introduction, describes the background to the problem,

defines the problem, explains its importance for study, and outlines the plan for the study. Chapter II, Review of the Literature, presents a review of literature related to the problem. Chapter III, Procedure and Findings, describes the setting used for the study, the procedures involved in collecting the data, and presents the findings of the study. Chapter IV, Summary, Conclusions and Recommendations, provides a summary of the study with conclusions and recommendations based on the findings.



## CHAPTER II

### REVIEW OF LITERATURE

For many years nursing education was conducted under the system of apprenticeship in which the student nurse learned from older nurses at the bedside. While it may be admitted that there was great value in the method if certain conditions were met, it was found very difficult to meet these conditions. Therefore, in an attempt to improve nursing education, much of the instruction was moved from the bedside to the classroom. This offered several advantages: there was adequate time for demonstrations of procedures, equipment could be collected and prepared in advance, and there was freedom from the confusion sometimes encountered in the busy hospital situation. Certain disadvantages were found in this new plan: the head nurse lost some of her interest in teaching after being freed from teaching responsibilities, there was a tendency for artificiality to creep into classroom teaching, and students were disturbed by the lack of consistency between classroom teaching and hospital practice. In an attempt to solve these problems, a more carefully planned program of clinical instruction was introduced. (5)

According to Jensen, this need for more clinical instruction was recognized in the early 1920's. (16) Even though students learn nursing at the bedside of patients, they need guidance and direction.

Few students have the educational background or maturity to learn by themselves. They need help and guidance all along the way. It is a fallacy to assume that because there is a wealth of clinical material available on a certain division, student nurses will automatically receive adequate experience there. Pressure of work, poor assignments, inadequate supervision, and many other factors may prevent the student from benefiting from the opportunities available. (15)

There has been an increasing emphasis upon the need for ward instruction. In 1932 Martha Ruth Smith suggested that the aims of ward teaching are "to improve the nursing care of the patient, to help the student to master new nursing technics; in other words, to teach her the practice of nursing." (16) In another article written in 1934 the same author pointed out the importance of planned ward practice since 90 per cent of the student's time in the typical school of nursing was spent in practice, with only 10 per cent in the classroom. (17) "Ward practice can be 'most real instruction' only when cooperative activity and shared planning and acceptance of mutual responsibility make it so." (17) In 1937, A Curriculum Guide for Schools of Nursing noted that theory and practice are both essential parts of the nurse's educational experience and that they should be integrated, not merely correlated. (7) Clinical instructors were added to the faculty to promote transfer of learning between classroom teaching and ward practice, thus providing a more carefully planned program of clinical instruction. (5) The clinical experience of student nurses came to be recognized as a part of the total curricular program and considered in relationship to other educational experiences and standards of the school. (14)

In planning the program of clinical instruction it must be remembered that "the ward exists for the patient, not for the student. Here the adjustment aim in nursing education is made quite clear and specific. The student is taught to adjust to the nursing situations created by the needs of her patients." (11)

The clinical instructional program is concerned with teaching students the care of patients. (5) It is recognized that it is in the clinical setting that the student is able to transform information into knowledge. (31) The student is highly motivated to learn because she is assuming responsibility for patient care, and she re-enforces her knowledge by using it immediately. These factors of motivation and re-enforcement are most important in the learning process. (43)

There is a definite trend now in basic nursing education programs to assist students to learn to analyze problems and solve them as they arise, rather than merely to learn certain technical procedures. To this end students are being encouraged to be critical in their thinking and ask questions about their work. (32) Such emphasis increases the need for high level instruction and supervision. As a part of the program, it is frequently necessary to bring certain things to a student's attention since the young student does not note everything that there is for her to see in a given situation. This is especially true when the student is carrying out an assignment on the hospital wards. (15)

Although it is essential to have planned teaching and supervision if students are to be assured a basic content of learning, nevertheless there are unlimited opportunities for incidental teaching.

Barrett lists some of the situations which present opportunities for incidental teaching: by example, answering and asking questions, demonstration of desirable performance, positive suggestions, and making opportunities for observation of unusual symptoms. (3) Man-  
grain also suggests that teaching is involved every time a person answers a question, shows how to perform a procedure, gives a report, or explains a treatment. (h3)

The student in the clinical area has various needs. First of all an orientation to the area is essential. Orientation is an attempt to meet needs of the student and supply her with much of the necessary basic information in respect to the floor plan, routines and procedures peculiar to the division, and purposes and nature of clinical practice. If orientation is inadequate, the student must continuously seek information, a practice which could cause irritation and unpleasant incidents as well as deter effective functioning of the nurse. One objective for orientation to the unit should be to acquaint the student with sources of information relating to the special service on the unit. (h)

The student needs help in interpreting functions of others in the nursing team and how they affect her. The student does have isolated bits of information, but she requires more if she is to get the total picture. (14) "She must be able to turn to her head nurse, supervisor, or ward instructor when she doubts her own ability to meet successfully the nursing situation with which she is confronted; if she does not do so, harm may result to the patient." (11) Most

workers tend to need guidance in performing their work and cannot proceed satisfactorily without it. Young students especially often must have help in making accurate, scientific observation. (16)

In order to plan and give adequate care, the student should learn all that she can about the patient. This includes knowledge of the patient as a person, his illness, mental, physical, and social factors. (14,28,33) When students receive their assignments, or when responsibility for a patient is transferred from one person to another, information is needed regarding the condition of the patient, special observations to make, and the patient's individual treatments. (6)

There are many new situations with much to learn throughout any clinical experience. Not everything can be taught at once. "To be most effective, teaching should be done when the individual needs it." (36) Also important is the fact that no two students have a common background. (11)

According to Jensen, it is not the mere repetition of facts that is desirable, but the student should have practice in obtaining information from many sources, pooling her findings and using this knowledge to help her solve her problems. However, the information the student "picks up" cannot always be relied upon as pertinent and reliable in each situation. (15)

Since the student constantly meets new situations and is often in need of help, who shall instruct and guide her?

Instructional personnel should be available constantly in the clinical units for the students who are learning to give nursing care. We can't allow the student to learn by trial and error.

If learning by doing is important, available instruction is also important. The instructor should be in the clinical area to give demonstrations as needed, to supervise the student, and have short conferences with her to discuss situations which arise while she is taking care of patients. (33)

Although a certain amount of repetition is necessary to fix information, uninteresting repetition should be avoided and the student should be taught how to apply the information available and to search out the new. (15)

The clinical instructor is said to provide a link between education and service, but she is not expected to carry out all the instructing merely because she is designated as instructor any more than the head nurse is expected to carry out all the nursing services because she is in charge of patient care. (40) There are considerable variations between the services of the various hospitals in the amount and quality of clinical instruction given.

Several authors agree that instruction and supervision of students are the joint responsibility of the clinical instructor and the head nurse. (11, 14, 24, 32) The clinical instructor and head nurse tend to bring out different aspects of the program, thus supplementing each other. (11) The number of students taught by an instructor is variable, as is the amount of participation in teaching by others in the area. (33)

The clinical instructor is limited in her activities by the number of students for whom she is responsible and by other responsibilities such as teaching of formal classes. She cannot be omnipresent, but can do spot checking and observe individual nursing procedures. (24)

"Ward teaching should be done by those who know the patient and appreciate the students' and staff nurses' needs." (3) Thus the head nurse should participate in the educational program. The head nurse's "instruction tends to be very realistic, immediately applicable, and governed by the needs of the patient." (11) She does not have time to instruct each student in details of nursing techniques, but she can give some instruction and supervision. (40)

The head nurse has a unique opportunity to interest the student in actual nursing practice, to stimulate her interest, to help her in applying principles and correlating classroom theory and ward practice. She knows her patients individually and can instruct the students about each case; she is the possessor of knowledge and should therefore be the dispenser of it. (36)

Though she has many duties which curtail her teaching time, there are various lessons which the head nurse can teach in a few words, with a simple suggestion or a minute's demonstration as she makes her rounds. (36)

There is no accepted standard of the amount and scope of teaching on the hospital units done by the clinical instructor, head nurse or supervisors. Variations occur in different situations.

The staff nurse also has a responsibility to the student. According to Melanie, "Every nurse in the nursing unit has a contribution to make and carries some responsibility for the education of the student." (42) Where the staff nurse functions as a team leader, she assumes a role similar to that of the head nurse. (8,43) She is in reality a miniature head nurse but she merely functions on a smaller scale. Being closer to the students than is the head nurse, the staff nurse has an even better opportunity to assist, guide and observe

them. (43) The team leader is constantly sharing and receiving information from patients or team members. (17) Mongrain describes the general staff nurse as a teacher also. "The students must be shown, their questions must be answered, all of which makes it necessary for everyone who works around learners to set good examples, to know what to do and why it should be done in such a manner." (43) Questions or difficulties which cannot be resolved by the team need to be brought to the attention of the head nurse. (9) When the student works with a more experienced nurse she can turn to her for instruction and guidance. (16) When the student needs help in interpreting orders and statements about the patient, she can gain other information from nurses who have cared for the patient previously, from interns, nurse instructors, and others. (28) The student is considered as a member of the health team. In this framework she is in a position to learn from all other members of the team. (5)

After she begins care of the patient, the student may find that her best sources of information will be the patient and his family. She can gain a great deal of knowledge about the patient and his family through conversation and observation. (26,28)

The procedure manual, dictionary and ward library should not be overlooked as means of supplementing information gained from other sources. (35)

Any F. Brown indicates that students have different needs. Even students who have been in the school the same length of time have had different experiences, hence learning is always an individualized experience. (5)



The learning process for the student in the clinical area may be affected by various factors. Barrett suggests that "the helpfulness of the ward staff, the freedom of students to ask questions, all influence the adjustment of the student to new activities." (3) If the student feels that she is a nuisance or is asking foolish questions, she may avoid asking questions or may seek answers from staff members who are not so well qualified to give her correct information or to make wise judgments. (3) Another influencing factor is the availability of persons to answer questions.

It has been reported that students tend to follow a definite pattern for seeking help. "The student looks first to a peer, next to a family member, and finally to a teacher. . . No student will seek out a teacher for help, however, unless prior to the acute problem the teacher and student have developed a relationship which the student finds warm, supportive and rewarding." (31)

Teachers, in relation to students, are authority figures and viewed as such by the students. Norris states: "The student gears her behavior to staying safe in a situation in which there is blame." (45)

Other factors influencing the learning process include the example of nursing care given by others and the attitudes of other staff members toward the student and her education. (44)

Communication is very important to the student nurse. Hayes and Gasaway state that

Not only should information be passed down the line, but there should also be a direct channel up the line if coordination of effort and skill of all personnel is to be effected. This vertical system is also essential for improving relationships between the individuals in authority and the workers. There is a horizontal method whereby persons on the same job level share information. Too often nurses fail to appreciate the value of communication and make little effort to participate wholeheartedly in transmitting information. (13)

These authors further state: "Unfortunately, manipulation of the human environment has not kept pace with the marked advances in medical science and with the improved facilities in the physical environment of the hospital. (13)

Studies have been made to determine some of the functions and responsibilities of clinical instructors and head nurses. A Study of the Responsibilities of the Clinical Instructor and Head Nurse in the Assignment of Students to the Care of Medical and Surgical Patients in a Selected Group of Diploma Schools of Nursing by Georgia Ann Snell of Catholic University, Washington, D. C. was made in 1954. The author interviewed twenty-two clinical instructors and twenty-two head nurses in ten schools of nursing and associated hospitals in an attempt to discover the responsibilities assumed individually and jointly by the clinical instructor and the head nurse in the assignment of students to the care of medical and surgical patients and to obtain their opinions in regard to sharing these responsibilities. Findings revealed that the clinical instructors felt that they had too many duties which kept them away from their units, hence were often unable to assist the students. Most head nurses reported that they assumed responsibility for motivating students in their assignments

by informal discussion on the unit in relation to the assignment, and by encouraging the students. It was found that the responsibilities assumed by the clinical instructor and head nurse varied greatly. There seemed to be a lack of coordination and communication between the clinical instructors and head nurses. Most of the head nurses had the responsibility of helping the students with their assignments, while one-half of the clinical instructors had this responsibility. Neither group had adequate time to devote to this responsibility. No pertinent conclusions can be drawn from the data obtained in this limited sampling. (53)

A study of head nurse activities was done at Massachusetts General Hospital in 1950 and reported by Ruth I. Ollan. (37) It involved five head nurse units for five days. It was found that the head nurses spent only 5.9 per cent of their time on the student program, plus 1 per cent on student assignments of patient care. Many head nurses had an important role in the student nurse program even though not directly responsible for student teaching. Of total time per student, one-half went into guidance and evaluation, one-fourth into planned instruction, and the other one-fourth in various other student activities.

In another head nurse study at Ottawa Civic Hospital and reported by Marion E. Botsford in 1955, it was shown that only 4 per cent of time and 3 per cent of activities remained to be divided between education of the patient and staff, indicating that little time and activity could be devoted to the student nurse. (30)

In a third study of head nurse activities performed by the nursing unit administrative staff on two medical divisions at The University Hospitals, Cleveland, Ohio, it was found that the head nurse in one division spent 2 per cent of her time on the student program, while the head nurse on the other division spent only 0.8 per cent of her time of the student program. (49) However, the length of observation time and the number of participants in the study were so limited, that it would appear unwise to draw any generalisations from the findings.

A study, The Role of the Staff Nurse in the Education of the Student Nurse, was made by Ellen B. Peterson of the University of Colorado in 1952. Data were obtained by means of opinionnaires from 113 students from seven hospitals in Colorado in order to determine the influence of staff nurses upon the education of the student nurse. The findings indicated that there was agreement among the students that staff nurses did influence them in the learning process, though the extent of influence was variable. There was a trend to report good interpersonal relationships among staff nurses and student nurses. The students indicated that staff nurses did quite a bit of bedside teaching. Staff nurses frequently helped the student to evaluate a patient's condition better and frequently made observations about patients which were helpful to the student in understanding and caring for the patient. Students believed that when taking questions to staff nurses their answers were usually in accord with what the student had learned in the classroom. The majority agreed that staff nurses usually gave them correct information, though one-third stated that

sometimes they received information which was later found to be incorrect. In response to a group of questions dealing with finding if and why students obtained help from the staff nurse rather than the supervisor or head nurse, there seemed to be differences in choice of seeking help depending upon the nature of help needed. Forty-six per cent of the students indicated that they sometimes went to staff nurses for help when the supervisor or head nurse was on the ward, while 20.4 per cent frequently went to staff nurses. The most frequent reasons for going to staff nurses were: the supervisor and head nurse were busy, better rapport existed with the staff nurses than with the supervisor or head nurse, equal ability of the staff nurse to help them, willingness of the staff nurse to help students, and a feeling that the supervisor or head nurse tended to grade down the student for what she did not know. (51) From this study it is apparent that staff nurses do provide a portion of the help and information obtained by students in the clinical area. The proportion of the student's information obtained from this source is not indicated.

Some studies have been done in the area of identifying problems of students in the clinical area. Sister M. Coletta Masseth of Catholic University conducted a study of Problems Encountered by Second-Year Students in their Clinical Nursing Learning Experience in a Selected School of Nursing. A summary was published in Nursing Research in October 1956. (50) It was found that problems related to general nursing activities, apprehensive and demanding patients, and conflicts with supervisory and non-supervisory personnel. Students generally seemed

to feel more free to ask assistance with problems related to caring for patients than with those related to co-workers. Students' recommendations were related to group conferences, teaching and supervision, clinical experience and team relationships.

Another study of similar nature was conducted by Avis Jean Davis of the University of Texas. A summary of the study, Problems of Students in Initial Medical-Surgical Nursing Experience, was published in Nursing Research in February 1957. (48) The findings indicated that the problem areas ranked from great to few were: direct patient care, clinical assignment, student-patient and student-family relations, student-personnel relations, and clinical instruction. Students recognized most problems, but had not sought help with almost one-half of them. No mention is made in the summary of the sources of help sought by the student.

In summary, it has been noted that there is little in the literature directly related to the problem of this study, which is that of ascertaining the sources and nature of information sought and obtained by student nurses while assigned for practice in a clinical area. A review of the evolution of nursing education from the apprenticeship system to current practices indicates the changing status of the student nurse from that of being an adjunct to the nursing services to that of being a learner. Although the major responsibility for selecting and organizing worthwhile learning experiences for the student nurse rests largely with the faculty, many others share this responsibility, particularly in the clinical area. One of the ways by which this

shared responsibility is demonstrated is through providing the student with authentic information which will expedite her orientation to nursing, assist in her adjustment to a particular clinical area, contribute to the depth of her understanding of the patient, and meet her own needs in terms of interpersonal relationships.

The literature was also reviewed for assistance in developing the design of this study.

Russel suggests that personal observations are the most valid means of obtaining data since the researcher knows what he has in mind and can observe and interpret data from that point of view. The observation method is recognized as the best manner of studying overt behavior. In addition the method is less demanding on the part of observed subjects than other methods, permits recording of behavior concurrently with its occurrence, and does not depend upon retrospect. (27)

Observation studies have been carried out by the methods of continuous observation and by work-sampling. Both methods have been employed in studies related to nursing, the methods yielding similar results. Since nursing is unlike the assembly-line type of situation, it was found that work-sampling is very successful in nursing studies. The intermittent type of observation allows the recorder to note activities of more persons. However, one disadvantage of this method is that since observations are instantaneous and sporadic, information obtained may be inadequate or even deceptive for properly classifying the activity. (29)

Jersild and Meigs have made helpful suggestions about direct observation as a research method. They point out the need to be

selective in observing since everything cannot be seen or recorded. Therefore it is essential to plan what to emphasize and what to ignore. A choice between predetermined categories or "running account" type of record must be based partially on the investigator's purpose. These authors further suggest that length of observation periods be planned to provide for breaks or rest periods, since observing may be quite exhausting. (41)

There is some criticism of the observation method because behavior may be distorted if a person knows he is being observed. Jersild and Meigs report that the presence of an observer does not distort behavior as much as might be expected. (41) Distortion of behavior may be kept to a minimum by careful preparation for the study and attention to the attitude of the observer.

H. Phoebe Gordon reported that much of the success of a time study was attributed to advance information being given to the subjects, posted schedules of observation periods, observers introduced to people to observe, advance practice periods of observation, and making reports of the study available afterwards. During the study the observers' attitudes were described thus:

Never--by word or expression--did they give evidence of making a critical evaluation of anything they saw. They appeared to be friendly and interested in the work being done, but they kept out of the way as much as possible and asked questions only when necessary. They created the impression that this was a valuable undertaking, worth doing accurately and well, but not at all a painful operation, and definitely of interest to everyone. (38)

In planning a study there is the problem of selecting an adequate sampling. Pfefferkorn and Rottman reported on a study of students in



timed procedures. They had originally planned to select nursing students whose records showed them as average in the group. However, this proved impractical and it was finally decided that the most feasible sampling plan was the chance inclusion of as many different students as possible in the timing of each procedure. Findings of the study supported the soundness of this method. (25)

The number of hours of observation needed for obtaining sufficient data is variable. Abdallah suggests that when the collection of additional data does not change the percentage distribution significantly, sufficient observations have been made. (29)

In conclusion, the literature indicates that:

1. Although the clinical instructor is the individual primarily responsible for the instruction and supervision of student nurses, the nature and scope of her responsibilities make it imperative that others, such as head nurses, team leaders, staff nurses, share in both teaching and supervision.
2. Much incidental teaching is concomitant to clinical practice.
3. Many unforeseen situations arise in the clinical area and accordingly the student must of necessity seek information which is essential for solving problems and promoting good nursing care.

CHAPTER III  
PROCEDURE AND FINDINGS

Preliminary to developing this study two hypotheses were formulated to the effect that:

1. The student nurse receives sufficient information in the classroom to enable her to function adequately in the clinical practice area, and
2. The student nurse receives all the needed information from persons primarily responsible for her instruction and supervision.

This study was designed in an attempt to prove or disprove these hypotheses. The purposes of the study were: (1) to determine the sources of information sought and obtained by student nurses in the clinical area and (2) the type of information obtained from the various sources.

Data were obtained by a series of observations of twenty-two student nurses in a medical area of a selected general hospital.

The site for the study was chosen on the basis of criteria established from literature which dealt with the development of sound programs in nursing.

Setting

In accord with the criteria established for the selection of the site for the study a general hospital of 584 beds, including 88

bassinets, was chosen. This hospital maintains a three-year diploma school of nursing which is fully accredited by the National League for Nursing. In addition it provides instruction and clinical practice for students enrolled in a four-year degree program offered by a college.

The medical department was chosen as the division in which to conduct the study because it is an area in which all students receive clinical experience and because students are assigned to this area throughout the year. The department has a total capacity of 103 beds, with an average daily census of 81.10. For convenience in providing nursing care, the department is divided into three units according to geographic location, resulting in unequal bed capacities, of 41, 33, and 29 respectively. There is no attempt to segregate the patients according to diagnosis or to requirements for nursing care, but rather according to available accommodations. This results in a variety of medical conditions being found in each nursing unit.

The largest nursing unit with bed capacity of 41 patients was selected as the specific site for the study because a larger number of students were assigned to this unit, insuring the availability of subjects to observe and making it possible to observe students at various levels of educational development. In addition, the physical arrangement of the unit was most favorable to the observation type study.

The selected unit consists of four 4-bed wards, twelve 2-bed rooms, and one private room. Each room has its own bathroom, with one bathroom between each two wards. Three 2-bed rooms at the far end of the hall are used as an isolation unit for resistant staphylococcus infections. The nurses' station is a large area with a partition

separating the medicine cabinets from the charting desks. Other service facilities include a kitchen, utility room, and a flower room.

Nursing personnel are assigned to the department as a whole, permitting approximately equal distribution among the three units according to bed capacity and census. In the unit selected for this study, the nursing staff includes a head nurse and assistant head nurse who share in administrative functions. Patients are grouped into three sections with registered nurses usually serving as section leaders, though junior and senior student nurses frequently serve as section leaders, especially from 3:00 to 11:30 p.m. and at night. There is usually one licensed practical nurse or aide assigned to each section and the section leader is responsible for the medications, most treatments, and charting for the patients assigned to the licensed practical nurses and aides.

Though the normal staffing pattern for this unit varied slightly from week to week, a general idea of the staffing plan may be gained by reviewing the number of persons assigned to this unit during one week of this study and including the 24-hour period. Staffing consisted of 10 registered nurses (including the head nurse), 4 senior students, 6 junior students, 2 sophomore collegiate students, 5 pre-clinical students, 3 licensed practical nurses, and 8 aides. A ward clerk divided her time among the three medical units. The supervisor of the medical department also was available part time in each of the three units. Study of the staffing pattern during the six months preceding the study revealed that the average number of registered

nurses was 9, the average number of practical nurses and aides was 10, while the number of students assigned to the area varied from 7 to 19, with an average of 13. It was thus ascertained that the staffing at the time of the study was very slightly above the average staffing pattern during the previous six months.

During the days of this study, the amount of nursing care provided for each patient per day varied from 3.53 to 4.97, averaging 4.14 hours. This was higher than the average of 3.2 nursing hours per patient recommended by the American Hospital Association and National League of Nursing Education in 1942. <sup>(1)</sup> The average daily nursing hours per patient during the week preceding the study were 4.08, one month prior to the study 3.86, six months previously 4.56, and a year before this study averaged 4.6 hours. The figures do not include hours of the preclinical students. The census averaged 32 patients per day during the period of this study, which is the average census for this unit. A study of the nursing hours per patient in the other nursing units of the medical department during these same periods revealed comparable data. Accordingly, it was apparent that the amount of nursing care available at the time of the study was comparable to that customarily found on this unit.

The school of nursing admits students once a year. The enrollment as of December 31, 1958 was 154 students, with 45 affiliates from a collegiate school of nursing, or a total of 199 students in the school. All students receive a portion of their preclinical experience in the medical area, a twelve week block of experience

in this area within a year following the preclinical period, and ten to twelve weeks advanced experience at a later time.

The number of students in this medical unit at any one time is dependent upon the rotation schedule. At the time of the study there were students from four different educational levels. These included a few seniors (diploma class of 1959), juniors (diploma class of 1960), sophomore collegiates (degree class of 1961), and the diploma class of 1961, who were called preclinical students at the time the study began, but after the first week were called sophomores. For purposes of this study the latter group will be referred to as preclinical students for the sake of clarity. Juniors and seniors were currently assigned 31 to 32 hours of clinical practice per week. Sophomore collegiate students were assigned 28 hours the first week and 31 hours the second week of the study. Preclinical students were assigned 20 hours the first week, 28 hours the second week.

The assignment of four levels of students concurrently to the same clinical area may appear to be educationally unsound. In this setting there is logical justification for an assignment of this type because student experiences are planned at different levels.

The preclinical students are assigned to the area for practice in basic procedures and beginning adjustment to individual patients. These students are assigned to patients who require simple nursing, yet afford opportunity to gain practice in the fundamentals of nursing.

During the year following the preclinical period, groups of students are assigned to the medical department for twelve weeks concurrent to instruction in Medical Disease Nursing. Effort is made to assign these students to care for patients with the illnesses that are being studied in the classroom insofar as possible. The objectives for this twelve-week period include acquiring knowledge of medical conditions essential to success in nursing, developing understanding of the principles of nursing care appropriate to this clinical area, and developing skill in the performance of nursing. During this time students are also given brief opportunities to assist the head nurse and section leaders for the purpose of gaining a concept of the teamwork needed to provide adequate nursing care.

Advanced experience in medical nursing is assigned in the latter part of the second year or in the third year for ten to twelve weeks. This experience is designed to provide a broader understanding of medical patients and their care, including the administrative aspects of planning care. Students are assigned to patients with more complicated problems; they gain experience as section leaders who coordinate activities of the nursing team under the direction of the head nurse; and they assist the head nurse with the administrative functions of ward management. During this time the student carries more responsibility than at earlier periods and much of this time is on the evening or night shifts. Accordingly, it would appear that diploma students are assigned to the medical department at three educational levels for accomplishing three different purposes. The presence of the three

groups at the same time tends to facilitate limiting the student's activities to those specifically selected for her particular phase of the program.

At the time of the study the fourth group of students were college sophomores on their second assignment to medical practice. The purposes for their practicum, the nature and size of assignments, and the concomitant instruction was the same as for the second level of diploma students. Although there were four groups of students in varying stages of the curriculum, there actually were only three levels of assignment.

The students in the degree nursing program have a broader background in the social sciences than the students in the diploma program. Therefore it might be expected that these students might display more depth of understanding interpersonal problems and greater facility in being self-directive.

Lambertson observes that assignment of nursing personnel must be based upon evaluation of the patient's nursing needs and the ability of personnel at different stages of professional development to meet the needs, thus justifying the presence of students at different levels of achievement. (18) Investigation reveals that this practice is utilized also in other diploma schools of nursing. This information was obtained by interviewing four faculty who have been or are presently employed in other diploma schools of nursing; the experience represented by these four faculty totalled thirty years obtained in ten schools of nursing. (See Interview Guide in Appendix F).



The case method of assignment is used for student nurses, each student being responsible for total nursing care of the patients assigned to her. While the assignments are planned by the clinical instructor and the head nurse, the students function under the direction of the section leader who may assist them as they need help.

During the first week of the study it was noted that the pre-clinical students observed generally were assigned to two patients in the morning and to three patients in the evening. During the second week, in which they became known as sophomores rather than preclinical, they were assigned to three patients in the morning and four patients in the evening. Sophomore collegiate students had an average assignment of three to four patients throughout the study. One student had her first experience as section leader and another worked with a section leader. The junior students who were assigned to clinical experience during the day were usually responsible for the care of four patients. Those assigned during the hours of 3:00 to 11:30 p.m. served as section leaders. The senior students served as section leaders in most instances, assisting the head nurse one time and being assigned to four patients on one occasion and to five patients at another time.

The faculty was in a ratio of one instructor for each nine students. Although there were two clinical instructors in the medical department, only one devoted her time in the clinical area to the nursing unit used for this study. Her duties also included classroom teaching and ward classes, hence she was generally available in

the clinical area approximately twenty hours per week. She was not present during the afternoon hours (3:00 to 7:00 p.m.) which were included in this study. During the first week of the study the instructor was ill one day. A portion of the time on succeeding days of the first week was spent in preparing clinical evaluations, hence the clinical instructor was not available on the ward a large share of the time. During the second week of the study she was present most of the time between the hours of 7:00 and 11:00 a.m.

During this study, nursing arts instructors were in the clinical area during both the morning and afternoon. At times they divided their supervision among the three units of the medical department and at other times between the medical and surgical departments. Occasionally two nursing arts instructors were present in the department at the same time. Although they were in the clinical area primarily for the purpose of supervising the preclinical students, they were available to other students as well.

It was the purpose of the instructors to plan the clinical assignments for the students, conduct an orientation program for students new to the area, assist with problems encountered by the students, and to help them to apply principles of nursing care. Students were encouraged to use initiative in problem-solving so they need not become overly dependent upon their instructors.

It would appear that the school of nursing is functioning adequately. It has full accreditation by the National League for Nursing and by the Oregon State Board of Nursing. The students achieve

satisfactorily in their State Board licensing examination. There have been no failures since 1954 at which time one student failed in Obstetric Nursing and another in Psychiatric Nursing which is obtained by affiliation away from the home school. Although achievement in State Board examinations may be considered only one measuring stick of success, it is one that cannot be overlooked, as the licensing examination is used nationally.

#### Procedure

This study was carried out according to the design outlined in Chapter I. The site tentatively selected proved to be acceptable for the study. Administrative clearance was readily obtained. (See copies of letters in Appendices A and B).

An explanation of the design and purpose of the study was made to the supervisor of the medical department, head nurse, clinical instructor, and nursing arts instructors. All expressed interest in the study and a willingness to cooperate.

It was ascertained that most students would be assigned to clinical practice between 7:00 and 11:00 a.m. and 3:00 and 7:00 p.m. Juniors and seniors frequently were assigned the hours of 3:00 to 11:30 p.m. and 11:00 p.m. to 7:30 a.m. However, in order to make comparisons between groups it was decided to make observations only between the hours of 7:00 to 11:00 a.m. and 3:00 to 7:00 p.m. on Monday through Friday. Saturday and Sunday were excluded from the study because instructors were not in the area on these days.

The next step was that of gaining the cooperation of the students. An explanation of the study was made to the students, including the design, what they might expect, and reassurance that the information obtained through the study would not be used to evaluate individual performance. It seemed best that students not know the exact nature of the study in order that they could not knowingly distort the data. For this reason it was explained that observations would be made of their activities and that the activities of the various classes of students would be compared. These preliminary explanations were made in the classroom where possible and later all students involved in the study were approached on an individual basis to be sure that they understood and were willing to cooperate.

For the trial observation, sophomore collegiate students assigned to another medical unit were selected. After three hours of observation in this unit, a fourth hour of observation was done in the selected medical unit, the subject being a student who would be transferred from this unit before the study began. This time gave sufficient opportunity for the observer to become acquainted with the physical environment, to test the recording device, and to gain skill in recording.

The form for recording observations had been devised as a modification of forms used in other studies. (2,10,52) A lined legal tablet was used for recording the observations. The heading of each sheet included the code letter for the student being observed, the educational level of the student, the student assignment (number of patients, section leader or other), hour of the day, date, and day of the study. The

page was divided into halves lengthwise, providing adequate spaces for one hour of observation. Each half contained columns for the time, the source of information, category of information, activity, and whether or not the information was sought by the student. Six spaces at the bottom of the page provided adequate space to tabulate the data obtained during one hour. (See sample in Appendix C)

A predetermined set of symbols was used to record the sources of information. (See Appendix E) Numbers were designated to indicate the category of information obtained.

In accord with the explanation given to the students it was considered advisable to record the time and the activities of the student in addition to the information obtained by the students. This was done during the trial observation period and was found to be very satisfactory. This also helped later to give meaning to the data for analysis. The columns for source and category were used only for items involving the obtaining of information by the student, making it easy to select the pertinent data for this study. A small column provided a place to put a check mark if the student solicited information.

Categories were established for defining the areas of information received by the student. For the purposes of this study they were defined as follows:

1. Information which applies to direct patient care - information concerning carrying out nursing procedures for the patient, assisting doctors with treatments or procedures, demonstrations of nursing care, the observation of the physical condition and behavior of patients, evaluation of patient needs for care, and teaching

- of patients (e.g., ask patient how he feels; receive demonstration on use of oxygen tent; inquire what the patient should know about his illness; how to administer new drug).
2. Information which applies to indirect patient care - information concerning patient assignments, interpretation of doctors' orders and various tests, location and care of nursing equipment, charting, errands for patient, information which leads to understanding of patient (e.g., listen to morning report; question regarding charting; how to care for nursing equipment; what is significance of laboratory findings).
  3. Incidental information - information concerning location of house-keeping equipment, time schedules for ward, hospital policy, information not pertaining to patient and his welfare, information concerning work of other personnel and not related to student's own assignment (e.g., where to find mop; where to take laboratory specimens; what are visiting regulations; who has narcotic keys; questions of identity of persons).
  4. Personal information - information concerning matters which are personal in nature, including information regarding hours and days assigned to clinical practice, ward classes, and interpersonal relations (e.g., where to receive care for injury; when to go to lunch; information regarding personal safety; conflict with other student; questions regarding personal attitudes).

During the trial observation period it was found essential to make brief explanations to the patients about the study. If explanations

were not made, patients tended to think that the observer was closely supervising the students and to show some resentment. However, a brief explanation that a study was being done in an effort to determine student nurse activities and not because of lack of confidence in the ability of the student seemed satisfactory to the patients. This experience was helpful in planning method of procedure for the actual study.

A list of students assigned to the selected medical unit was procured a few days before the study was to begin, along with the hour schedules for these students. The schedule for the first week included 1 senior, 3 junior, 5 sophomore collegiate, and 9 preclinical students assigned to the area during the hours selected for the study. A schedule was prepared which would permit a representative of each group to be observed during each of the 8 hours of the days which were included in the study. Due to varying hour schedules it was not possible to arrange a schedule which would permit equal hours of observation per student. Therefore, it was decided to observe any student available within the specified group at the specified hour. Illness, changes in hours and assignments, and the assignment of students to the 6-bed staphylococcus isolation unit which was excluded from the study made this the most feasible plan. When this schedule was prepared, students were contacted in advance on an individual basis and an explanation of the study was made. They were also told in advance at what hours they would be observed. Schedules were planned so the students would be observed for only one hour at a time to eliminate strain from being under constant observation. (See sample schedule for observations in Appendix D)

On the first morning of the study a brief explanation of the study was given to the entire staff of this unit following morning report. All were instructed to feel free to explain the study to others and answer the questions of patients, for it was essential to have understanding and cooperation of all. Much interest was expressed by the staff and patients and everyone was cooperative.

During the observations the observer tried to remain as unobtrusive as possible. In order to maintain rapport with students and patients, it was found essential to carry on some conversation with them, but this was kept to a minimum and confined largely to time spent in walking down the long hall and to waiting periods. The students tended to ask questions and seek help from the observer at first, but the observer explained that she could not become a part of the environment, nor did she have knowledge of current practices and procedures in this particular area.

Some students exhibited a degree of self-consciousness at first, but they seemed most concerned about details of technique. They did not seem to feel inhibited in seeking help and information when needed. No student seemed upset by being observed and some actually appeared to enjoy it.

The second week of the study involved a change of most of the students assigned to this medical unit. Though some had not been on this unit recently, all had had previous experience here. After obtaining the names of students and the hour schedules, a plan for observation was constructed similar to that of the first week. It was necessary to explain the study to each of these students before observations were



made. Those assigned to the unit this week included 1 senior, 4 junior, 2 sophomore collegiate, and 5 preclinical students. During both weeks it was often necessary to make changes in the schedule of observations because of illness of the students or because of changes in their hours of assignment due to illness of other members of the nursing staff. A review of previous time schedules reveals that unanticipated assignment changes seem to be common policy in this setting.

A few hours of observation were made during a third week because of lack of availability of junior and senior students for observations during the first two weeks at the required hours.

These hours of observation represent a sampling of students at four educational levels for 15 hours per group, or a total of 60 hours. Each group was sampled at least once for each hour of the periods 7:00 to 11:00 a.m. and 3:00 to 7:00 p.m. The students used for the study included 3 seniors, 5 juniors, 6 sophomore collegiates, and 8 preclinicals, or a total of 22 participants.

### Findings

The number of instances in which students obtained information while in the clinical area has been listed in tables which allow comparisons to be made between types of information obtained from various sources and the nature of information obtained by students at different educational levels.

#### Information Obtained Concerning Direct Patient Care

Table I indicates the number of times information concerning direct patient care was obtained by students at different educational levels.

TABLE I  
 FREQUENCY WITH WHICH INFORMATION OBTAINED  
 CONCERNING DIRECT PATIENT CARE<sup>a</sup>

	Seniors		Juniors		Sophomores		Preclinicals		TOTALS	
<b>Persons:</b>										
Patient	(82)	96	(85)	95	(86)	104	(116)	133	(369)	428
Head nurse	(9)	19	(9)	15	(3)	6	(1)	1	(22)	41
Student	(4)	6	(5)	10	(3)	8	(6)	6	(18)	30
Staff nurse	(3)	5	(1)	5	(5)	10	(3)	5	(12)	25
Aide	(1)	5	(1)	4		-	(-)	1	(2)	10
Instructor	(-)	1	(2)	3	(-)	2	(1)	3	(3)	9
Doctor	(1)	3	(-)	1		-	(1)	1	(2)	5
Supervisor	(-)	2		-		-		-	(-)	2
Visitor		-		-	(-)	1		-	(-)	1
<b>Other Sources:</b>										
Kardex	(7)	7	(5)	5	(8)	8	(1)	1	(21)	21
Chart	(1)	1	(5)	5	(3)	3		-	(9)	9
	(108)	145	(113)	143	(108)	142	(139)	151	(450)	581

<sup>a</sup>Figures appearing in parentheses indicate the number of times the information was sought by the student. Other numbers indicate the total number of times information was obtained.

It was found that the majority of information concerning direct patient care was received from the patient. The preclinical students obtained this category of information from patients a total of 133 times, the sophomores 104 times, the seniors 96 times, and the juniors 95 times, making a total of 428 times that information in this category was obtained from patients. There were 369 instances in which the student solicited the information, namely the preclinical students sought information 116 times, while the sophomores, juniors, and seniors sought information 86, 85, and 82 times respectively.

Most of the information from patients was related to evaluating the patient's condition, his subjective symptoms, and his personal preferences, including such questions as: "How are you today?" "Is your headache better now?" "Do you like ice in your drinking water?" "Are you tired of sitting up?" "Can you tolerate your bed down flat?" It will be noted that some of these questions were valuable in establishing and maintaining rapport with the patient. Thus this type of question may indicate a need for establishing satisfactory relationships with the patient rather than a real need for information on the part of the student, hence serves a dual purpose.

In other instances it was noted that patients instructed the students how to aid them to get up or how they liked to take their pills. In four instances patients instructed students in the use of the Bird respirator. One patient instructed a student how to apply his hot pack.

Preclinical students had smaller assignments than other students and spent most of their time in direct patient care, thus providing

closer patient contacts than noted in the assignments of older students. This fact may explain the greater frequency of items of information obtained from the patient by the preclinical students.

The second highest number of items of information was obtained from the head nurse. The seniors received information most frequently, or 19 times, while the juniors received information 15 times, the sophomores 6 times, and the preclinical students once. The students sought the information in approximately one half of these instances, or 22 out of 41 times. The seniors and juniors each sought information 9 times, the sophomores 3 times, and the preclinical students once. Many of the questions concerned medications, as illustrated by the following questions: "How is this drug given?" "Is it all right to give this p.r.n. medication now?" "Shall I give demerol to the patient?" Students also inquired about how to administer carbogen, whether or not to order a suction machine for a comatose patient, and various questions about techniques. Several questions involved judgment in meeting patient needs. Information not sought by the student frequently involved informing the student that a new medication or treatment had been ordered for the patient or informing a student of a change in a patient's condition.

Other students provided information in 30 instances. The juniors obtained information from other students 10 times, the sophomores 8 times and the seniors and preclinical students 6 times each. Information was sought in 18 of the 30 instances, 6 times by the preclinical students, 5 times by the juniors, 4 times by the seniors, and 3 times by the sophomores.

A tendency was noted for students to seek information from persons readily available. Since other students were frequently available, there was a tendency to ask them for information. Among questions asked were: "How do you discontinue an I. V.?" "What do you do with contaminated articles from isolation?" "How do you fix the hot pack for this patient?" "How do you operate the Bird respirator?" "How do you give this medication?" Students did not always seek information from those of the same educational level or above. For instance, a senior student asked a sophomore about taking radial and apical pulse. Other information involved a student serving as section leader asking students assigned to her section whether or not the patient could help himself, could eat by himself and similar information. In other instances younger students reported to the older students that the patient needed a pain medication or consulted with the section leader in regard to meeting other patient needs.

Staff nurses provided information in 25 instances. The sophomores received information 10 times, while each of the other class groups received information 5 times. The sophomores sought this information 5 times, seniors and preclinicals 3 times each, and juniors 1 time, or a total of 12 times. Information obtained from staff nurses tended to be similar in nature to that obtained from the head nurse, including such questions as: "How shall I take the temperature of this critical patient?" "What pulse rate did you count?" "How do you take dishes out of isolation?" "How fast should this I. V. run?" Staff nurses, being more familiar with the patients than the students, sometimes

volunteered items of information such as: "This patient can get up by himself." "The patient will need his p.r.n. medication." At times the staff nurses conveyed information concerning new orders, this information being given to the staff nurse as section leader by the head nurse and passed along by the section leader to the student assigned to the patient.

Nursing aides contributed information to students 10 times, 5 times to seniors, 4 times to juniors, and once to preclinicals. In only 2 instances was the information sought by the student, once by a senior and once by a junior. These questions were: "What was the patient's pulse?" "Has the patient had this thermometer long enough?" The other information given by the aides concerned patient needs, such as informing that a patient was dyspneic and needed medication and that an intravenous was finished.

The instructor provided information a total of 9 times. The juniors and preclinicals received information 3 times each, the sophomores twice, and the seniors once. This information was sought by students only 4 times, twice by the juniors and once each by the sophomores and preclinicals. Information given concerned administration of medications, instruction concerning isolation technique, how to take radial and apical pulses, and details of nursing procedures.

Doctors provided information 5 times, of which seniors received information 3 times and juniors and preclinicals once each. Senior and preclinical students sought information one time each. The senior asked: "Do you want the patient in Trendelenberg position?" The preclinical student watched a bone marrow puncture in which the doctor

explained the procedure to her. The other items of information involved instruction concerning a medication, information to give the patient's family concerning his care, and a patient's need for a clean gown.

In two instances the department supervisor provided information to senior students concerning patient needs. This information was not sought by the student.

In one instance a visitor reported to a sophomore student that a patient needed her bed changed.

Students were also found to seek information from the kardex and chart relating to direct patient care. (The kardex contained the patient's name, age, diagnosis, and orders for medication and treatment.) In all instances the students voluntarily referred to these sources. They looked to see if there were orders for pain medications, if a patient could feed himself, have the bed elevated, have water to drink, or if urine should be saved. In the case of pain medications, it was then necessary to check the patient's chart to ascertain when the medication was last given. The chart was also referred to for new orders or to check on old orders. This was usually done when the kardex was not available or if further information was needed than could be obtained from the kardex. It was observed that sophomore students referred to the kardex 8 times, seniors 7 times, juniors 5 times, and preclinical 1 time, or a total of 21 times. (The older students had more patients assigned to their care than did the younger students.) Juniors referred to the chart for information 5 times, sophomores 3 times, and seniors once, making a total of 9 times.

Of information obtained from the various sources concerning direct patient care, the preclinical students obtained information most frequently, or 151 times, of which they sought the information 139 times. The other classes obtained information approximately an equal number of times, the seniors 145 times, the juniors 143 times, and the sophomores 142 times. Information was sought by the juniors 113 times and by the senior and sophomore students 108 times each. Of the 581 times that students obtained information, they sought it in 458 instances.

#### Information Obtained Concerning Indirect Patient Care

Table II indicates the information obtained by the students concerning indirect patient care. This type of information was given in approximately one half as many instances as information pertaining to direct patient care.

Other students were the most frequent source of this category of information. Juniors obtained this information 23 times, seniors 15 times, sophomores 14 times, and preclinical 8 times, or a total of 60 times. Of the 60 times in which this information was obtained, it was sought by the students 41 times, 17 times by juniors, 12 times by sophomores, and 6 times each by seniors and preclinical.

In seven instances this information included morning report given by other students. Many times students who had completed their own assignments asked other students if they needed help. In at least two instances students asked other students about the interpretation of a medication order. In two instances seniors serving as section leaders asked information concerning the assignments of younger students in



TABLE II

FREQUENCY WITH WHICH INFORMATION OBTAINED  
CONCERNING INDIRECT PATIENT CARE<sup>a</sup>

	Seniors		Juniors		Sophomores		Preclinicals		TOTALS	
<b>Persons:</b>										
Student	(6)	15	(17)	23	(12)	14	(6)	8	(41)	60
Patient	(8)	12	(5)	11	(6)	11	(5)	14	(24)	48
Head nurse	(15)	23	(1)	8	(3)	7	(3)	5	(22)	43
Staff nurse	(5)	10	(2)	6	(8)	12	(4)	4	(19)	32
Aide	(-)	3	(7)	7	(3)	3	(1)	3	(11)	16
Instructor	(1)	2	(2)	4		-	(3)	4	(6)	10
Supervisor	(1)	1		-		-		-	(1)	1
Ward clerk		-		-	(1)	1		-	(1)	1
Other department personnel	(1)	1		-		-		-	(1)	1
<b>Other Sources:</b>										
Kardex	(12)	12	(10)	10	(8)	8	(6)	6	(36)	36
Chart	(3)	3	(5)	5	(1)	1	(3)	3	(12)	12
Ward library	(1)	1	(3)	3	(1)	1	(6)	6	(11)	11
Assignment kardex	(4)	4	(4)	4		-	(2)	2	(10)	10
	(57)	87	(56)	81	(53)	58	(38)	55	(193)	281

<sup>a</sup>Figures appearing in parentheses indicate the number of times the information was sought by the student.

Other numbers indicate the total number of times information was obtained.

their sections. Junior and senior students frequently were section leaders and for this reason often needed to confer with other students assigned to their sections. Students asked various other questions such as: "How do you clean a unit after the patient is discharged?" "What equipment is kept in the patient unit?" "Who took my patient's bedpan?" "Where is the hot pack machine kept?" "What is this medication?" "How do you care for this equipment?"

The second highest number of incidents of obtaining information were from the patient. The preclinical students obtained this information 14 times, seniors 12 times, and juniors and sophomores 11 times each, or a total of 48 times. This information was solicited in only one half of these instances, or 24 times, 8 times by seniors, 6 times by sophomores, and 5 times each by junior and preclinical students. Much of this information concerned the patient's family background as well as some history of his illness and length of hospitalization. In a few instances information concerned location of nursing equipment and its care, such as where to find the material for his hot packs and how to clean the mouthpiece of the Bird respirator. Information was also given for doing errands for the patient, such as giving phone numbers and messages to relay to other persons. One time a student asked a patient if the empty bed next to him had been washed.

The head nurse was a frequent source of information, providing 43 items of information, 23 to seniors, 8 to juniors, 7 to sophomores, and 5 to the preclinical students. This information was solicited in 22 instances, 15 times by seniors, 3 times each by sophomores and

preclinical, and once by juniors. This information included afternoon reports, interpretation of doctor's orders, changes in assignments, location and care of equipment, explanation of laboratory tests, how to make requisitions, and how to chart. On some occasions senior students worked at the desk assisting the head nurse, thus increasing contacts with the head nurse.

Some of the questions asked the head nurse were: "How do you make a requisition for extra nourishment for the patient?" "How do you fix normal saline solution?" "What alcohol do you use with the Bird respirator?"

Staff nurses supplied information 32 times, 12 times to sophomores, 10 times to seniors, 6 times to juniors, and 4 times to preclinical students. Information was sought by the students 19 of these times, 10 times by seniors, 8 times by sophomores, 4 times by preclinical, and 2 times by juniors. Examples of questions asked the staff nurses are: "What do the yellow slips in the assignment kardex mean?" "How do you arrange the patient's chart after he is discharged?" "Did Dr. \_\_\_\_\_ see his patient?" "Are there orders for the new patient yet?" "Can this patient have a pain pill while he has the order for nothing by mouth?" Staff nurses also informed students that new patients were to be admitted and would be included in their assignments and one time informed a student that a piece of nursing equipment was not functioning properly.

Aides supplied 16 items of information, 11 of which were sought by the students. Juniors obtained this information 7 times, seniors,

sophomores, and preclinical 3 times each. The juniors sought this information 7 times, sophomores 3 times, and preclinical once. This information included reporting on patient care for purposes of charting and answering such questions as: "Which patient gets physical therapy?" "Do you take temperatures?" "Who has room number \_\_\_?" In two instances instruction was given concerning use of the intercommunication system and operation of the dumbwaiter.

The instructor supplied information 10 times, 4 times each to juniors and preclinical, and twice to seniors. This information was sought 3 times by preclinical, twice by juniors, and once by a senior student. In two instances information was given to junior and senior students concerning the ability of younger students to give medications and certain treatments. Twice preclinical students received instruction in charting. Information was given twice as to how and when to obtain the Bird respirator. Instruction was given to a junior student concerning tuberculosis. Instructors also answered the questions: "Where do they put used I. V. equipment?" and "Where do they keep carbogen bags?"

The supervisor answered a senior's question, "Where do you keep this medication?" The ward clerk was asked by a sophomore if she knew where rectal gloves were kept. Information was obtained from personnel of another department once by a senior in trying to locate a doctor needed to give care to his patient.

Students referred to the Kardex to find orders for the care of patients assigned to them, to ascertain patients' names, diagnoses and similar information. All students made their work lists from the

kardex. During the period of observations seniors referred to the kardex 12 times, juniors 10 times, sophomores 8 times, and preclinical students 6 times, or a total of 36 times.

Students referred to the patients' charts for further checking of orders, information about the patient and his progress, and laboratory reports. The junior students sought this information 5 times, seniors and preclinical students 3 times each, and sophomores once, or a total of 12 times.

The ward library, which included procedure manual, ward manual, diet manual, drug books, and dictionary, was used 11 times, 6 times by preclinical students, 3 times by juniors, and once each by seniors and sophomores. It was observed that most frequently the information sought concerned drugs and their purposes. The preclinical students who had the least experience with drugs sought this information most frequently. In two instances preclinical students looked in the dictionary for terms to use in charting. A junior used the diet manual to find out what foods were allowed on a light diet.

The assignment kardex, which listed the students' assignments and designated lunch hours, was used not only to ascertain the student's own assignment, but also to find who else was assigned to the same section. As might be expected, the seniors and juniors who frequently served as section leaders sought this information most frequently, or 4 times each, while the preclinical students sought this information twice, making a total of 10 times.

Seniors obtained information pertaining to indirect patient care 87 times, the juniors 81 times, sophomores 58 times, and preclinical 55 times, making a total of 281 times that information was obtained. Students sought this information in 193 instances, the senior students 57 times, juniors 56 times, sophomores 53 times, and preclinical 38 times. It was observed that seniors and juniors obtained information in this category most frequently. This is in contrast to information pertaining to direct patient care, which was obtained most frequently by preclinical students who were assigned to direct patient care while junior and senior students frequently assumed responsibility as section leaders and for directing activities of others.

#### Incidental Information Obtained

Table III indicates the frequency with which incidental information was obtained from various sources by the students at different class levels.

Incidental information was obtained most frequently from the patients, 9 times each by junior and preclinical students, 7 times by seniors, and 5 times by sophomore students, or a total of 30 times. In most instances this information was sought by the student, 7 times each by juniors and preclinical, 6 times by seniors, and 5 times by sophomores, or a total of 25 times.

Much of this information was obtained from patients in the course of conversation while the students were giving patient care. Several times questions were asked as to the kind of flowers or where they were obtained. Students also asked about the patients' books, nailpolish, cosmetics, perfume, and a decorative lamp owned by one patient.

TABLE III

FREQUENCY WITH WHICH INCIDENTAL INFORMATION OBTAINED<sup>a</sup>

	Seniors	Juniors	Sophomores	Preclinicals	TOTALS
<b>Persons:</b>					
Patient	(6) 7	(7) 9	(5) 5	(7) 9	(25) 30
Student	(6) 6	(8) 9	(5) 6	(5) 5	(24) 26
Head nurse	(8) 9	(3) 4	(4) 4	(5) 5	(20) 22
Staff nurse	(7) 7	(4) 4	(5) 5	(4) 4	(20) 20
Aide	(5) 5	-	(4) 5	-	(9) 10
Instructor	(1) 1	-	-	(2) 2	(3) 3
Dietary maid	(2) 2	-	-	(1) 1	(3) 3
Other department personnel	(1) 1	-	(2) 2	-	(3) 3
Maid	-	(1) 1	(1) 1	-	(2) 2
Licensed practical nurse	-	-	(1) 1	-	(1) 1
Ward clerk	(1) 1	-	-	-	(1) 1
<b>Other Sources:</b>					
Assignment karex	(3) 3	(1) 1	-	(3) 3	(7) 7
Ward library	-	-	(2) 2	-	(2) 2
	(40) 42	(24) 28	(29) 31	(27) 29	(120) 130

<sup>a</sup>Figures appearing in parentheses indicate the number of times the information was sought by the student.

Other numbers indicate the total number of times information was obtained.

These questions appeared to serve a useful purpose in establishing and maintaining rapport with the patient. Some other questions concerned identity of persons, how to pronounce a name, and where a student had gone.

Other students supplied incidental information in 26 instances, 11 times to juniors, 6 times each to seniors and sophomores, and 5 times to preclinical students. Students sought the information in 24 out of the 26 instances, juniors 8 times, seniors 6 times, sophomores and pre-clinicals 5 times each. Four times students inquired about the identity of other individuals. Several times they inquired if someone was using a piece of equipment, such as a medicine tray or blood pressure cuff. Twice other students were asked if they had the narcotic keys. One asked how to fold a towel to place on a medicine tray. Another inquired how to telephone a student who had just left the department. One sophomore informed her section leader that she was going to supper. Other questions included: "What is in this medicine glass?" "What are you doing with that linen?" "Are you busy here?"

The head nurse supplied information 22 times, 9 times to seniors, 5 times to preclinicals, and 4 times each to juniors and preclinicals. This information was sought in 20 instances, 8 times by seniors, 5 times by preclinicals, 4 times by sophomores, and 3 times by juniors. In two instances the head nurse informed a student that she was leaving the department for a short time. Other information involved such questions as: "Has the address-o-graph for the new patient come up yet?" "Who has the narcotic keys?" "Where is the section leader?"



"Who expired?" "When are the visiting hours?" "Is the doctor still here?"

Staff nurses provided information in 20 instances, 7 times to seniors, 5 times to sophomores, and 4 times each to juniors and preclinical students. All of this information was sought by the student. Five times the students asked who had the narcotic key. Other questions included: "Is this pitcher yours?" "Where is the medicine card?" "Who should I leave the keys with?" "Are you using the blood pressure cuff and stethoscope?" "Do you have any rubber bands with you?"

Information was given by aides 10 times, 5 times each to seniors and sophomores. This information was sought 9 times, 5 times by seniors and 4 times by sophomores. Some of the questions included: "Where is the other aide?" "What room is the patient in?" "Where do I put the urine specimens?" "Is this table in your way?" "Is the ward clerk here?" In the one instance in which information was not sought, an aide informed a student that there were no more water pitchers in the kitchen.

Information was supplied by instructors, dietary maids, and other department personnel 3 times each and sought by students in each instance. The instructor was questioned regarding the identity of a staff nurse, where to find another student, and what the instructor was doing. The dietary maid was asked if there were more pitchers, if she had seen a glass the student had set down momentarily, and if a tray had come up from the kitchen. Information from other department personnel involved asking where a new patient would be and if a certain doctor were still in the hospital.

Information was sought and obtained from the maid twice, once by a junior, and once by a sophomore student. One asked about the work of the maid and the other asked if an oxygen tank would interfere with her cleaning duties.

A sophomore student asked one question of a licensed practical nurse concerning the location of water pitchers. A senior student asked the ward clerk if her hand had been injured.

The assignment kardex was referred to 3 times each by seniors and preclinicals, and once by juniors, or a total of 7 times. In three instances students sought to find out where they might find certain nurses. They also sought to find who was assigned to a certain patient, the name of a section leader, and the nature of other individuals' assignments. A sophomore student referred to the ward library twice while not busy with patient care, reading information about hospital policy.

It was noted that seniors obtained incidental information more frequently than did the other class groups, or 42 times. This information was sought in 40 instances. Sophomores obtained information 31 times, seeking it in 29 instances. Preclinical students obtained information 29 times, of which they sought the information 27 times, and juniors obtained this information 28 times, of which they sought the information 24 times. Senior students obtained incidental information most frequently from the head nurse. Junior and sophomore students obtained this information most frequently from other students while preclinical students obtained incidental information most frequently from the patient. It would appear that in most instances

incidental information was sought from persons in close proximity to the student.

Incidental information was obtained a total of 130 times by all students included in the study. They sought this information 120 times.

#### Personal Information Obtained

Table IV represents the frequency with which personal information was obtained by each group of students. It was found that most personal information was obtained from other students, being obtained 10 times by preclinicals, 8 times by sophomores, 4 times by juniors, and twice by senior students, or a total of 24 times. Students sought this information in 15 instances, preclinicals 7 times, sophomores 6 times, and junior and senior students once each. Many of the questions concerned comparison of assignments, hour schedules, and what time the other student was scheduled to go to supper. One student was informed that she was wanted on the telephone.

The head nurse supplied personal information 5 times, 3 times to seniors, twice to sophomores. The seniors sought the information all 3 times, while sophomores sought it once, or a total of 4 times. Four of these items dealt with lunch hours and the other item pertained to the next day's assignment.

Juniors obtained information from the instructor twice, seeking it once. In one instance this information pertained to ward conference.

Personal information was obtained from patients in two instances, once by a senior and once by a preclinical student, being sought in the first instance only. The senior student sought to find out the

**TABLE IV**  
**FREQUENCY WITH WHICH PERSONAL INFORMATION OBTAINED<sup>a</sup>**

	Seniors		Juniors		Sophomores		Preclinicals		TOTALS	
<b>Persons:</b>										
Student	(1)	2	(1)	4	(6)	8	(7)	10	(15)	24
Head nurse	(3)	3	-	-	(1)	2	-	-	(4)	5
Staff nurse	(1)	2	(1)	1	-	-	(-)	1	(2)	4
Instructor	-	-	(1)	2	-	-	-	-	(1)	2
Patient	(1)	1	-	-	-	-	(-)	1	(1)	2
Licensed practical nurse	(1)	1	-	-	-	-	-	-	(1)	1
<b>Other Sources:</b>										
Assignment cardex	(2)	2	-	-	(1)	1	(1)	1	(3)	4
	(9)	11	(3)	7	(7)	11	(8)	13	(27)	42

<sup>a</sup>Figures appearing in parentheses indicate the number of times the information was sought by the student. Other numbers indicate the total number of times information was obtained.

results of a basketball game and the other student obtained information about her roommate from the patient who was also a student nurse.

A licensed practical nurse provided information to a senior student once in response to a question concerning the material in her uniform.

The assignment kardex was referred to twice by seniors and once each by a sophomore and a preclinical student to ascertain the supper hour to which assigned and to review the hour schedule.

Personal information was obtained 13 times by preclinical, 11 times each by seniors and sophomores, and 7 times by junior students, making a total of 42 times that personal information was obtained. Information was sought 27 times, 9 times by seniors, 8 times by preclinical, 7 times by sophomores, and 3 times by juniors. The seniors received most personal information from the head nurse, while the other class groups received the greatest number of items of information from other students.

#### Summary of Information Obtained from all Sources

Table V presents a summary of information obtained from all sources and information in all categories, as obtained by senior, junior, sophomore, and preclinical students.

Approximately one half of all information obtained was supplied by the patients. Information was obtained from patients a total of 508 times, 428 of which applied to direct patient care, 48 to indirect patient care, 30 to incidental information, and 2 to personal information. Of this information obtained, the students sought information 419 times, 369 times applying to direct patient care, 25 times to

TABLE V

TOTAL FREQUENCY WITH WHICH ALL TYPES OF INFORMATION  
OBTAINED FROM ALL SOURCES<sup>a</sup>

	Direct		Indirect		Incidental	Personal	TOTALS			
	Patient Care	Patient Care	Patient Care	Patient Care						
<b>Persons:</b>										
Patient	(369)	428	(24)	48	(25)	30	(1)	2	(419)	508
Student	(18)	30	(41)	60	(24)	26	(15)	24	(98)	140
Head nurse	(22)	41	(22)	43	(20)	22	(4)	5	(68)	111
Staff nurse	(12)	25	(19)	32	(20)	20	(2)	4	(53)	81
Aide	(2)	10	(11)	76	(9)	10		-	(22)	36
Instructor	(3)	9	(6)	10	(3)	3	(1)	2	(13)	24
Doctor	(2)	5		-		-		-	(2)	5
Other department personnel		-	(1)	1	(3)	3		-	(4)	4
Supervisor	(-)	2	(1)	1		-		-	(1)	3
Dietary maid		-		-	(3)	3		-	(3)	3
Licensed practical nurse		-		-	(1)	1	(1)	1	(2)	2
Ward clerk		-	(-)	1	(1)	1		-	(1)	2
Maid		-		-	(2)	2		-	(2)	2
Visitor	(-)	1		-		-		-	(-)	1
<b>Other Sources:</b>										
Kardex		21		36		-		-		57
Chart		9		12		-		-		21
Assignment kardex		-		10		7		4		21
Ward library		-		11		2		-		13
<b>TOTALS</b>	(458)	581	(192)	281	(120)	130	(27)	42	(797)	1034
<b>PER CENT</b>	(57.4)	56.2%	(24.1)	27.2%	(15.0)	12.6%	(3.5)	4.0%	(100)	100%

<sup>a</sup>Figures appearing in parentheses indicate the number of times the information was sought by the student.

Other numbers indicate the total number of times information was obtained.

incidental information, 24 times to indirect patient care, and once to personal information. Most of this information was that customarily asked of patients in order to keep informed of their needs and to maintain rapport.

Information was obtained from other students in 140 instances, 60 of which concerned direct patient care, 30 indirect patient care, 26 incidental information, and 24 personal information. In 98 instances, or approximately two-thirds of the total instances, the information was sought by the students, 41 items pertaining to indirect patient care, 24 incidental items, 18 items relating to direct patient care, and 15 to personal information.

The head nurse furnished information concerning indirect patient care 43 times, concerning direct patient care 41 times, incidental information 22 times, and personal information 5 times, or a total of 111 times. In approximately one half of these instances the information was sought by the student, or 68 times. Information was most frequently sought concerning direct and indirect patient care, or 22 times each. Incidental information was sought 20 times and personal information 5 times. A portion of this information related directly to the students' learning experiences and a portion to service needs.

Staff nurses supplied information in 81 instances, 32 of these referring to indirect patient care, 25 to direct patient care, 20 to incidental information, and 4 to personal information. Of the 53 items sought by the students, 20 were questions regarding incidental information, 19 pertained to indirect patient care, 12 pertained to direct patient care, and 2 were personal.

Information was obtained from aides 36 times, 16 times concerning indirect patient care, 10 incidental, and 10 pertaining to direct patient care. Students sought the information 22 times, 11 times concerning indirect patient care, 9 times incidental, and twice pertaining to direct patient care.

The instructor provided information to students a total of 24 times, providing information concerning indirect patient care 10 times, direct patient care 9 times, incidental information 3 times, and personal information 2 times. This information was sought by the students 13 times, or 6 times concerning indirect patient care, 3 times each concerning direct patient care and incidental information, and once relating to personal information. Most of the instructors' information was directly related to the students' learning.

Doctors supplied information in only 5 instances, all pertaining to direct patient care. In 2 instances this was sought by the students.

Information was obtained from other department personnel 4 times, of which 3 items were incidental information and one item referred to indirect patient care. Information was sought in all 4 of these instances.

Information was obtained from the supervisor two times concerning direct patient care and once concerning indirect patient care. Students sought this information only once concerning indirect patient care.

The dietary maid provided three items of incidental information which were solicited by the student.



Licensed practical nurses provided one item of incidental information and one of personal information in response to questions from students.

The ward clerk provided two items of information to students, one being incidental in nature and the other referring to indirect patient care. The latter was sought by the student.

The maid was questioned concerning incidental information two times. A visitor offered information concerning a patient one time.

Other sources utilized by the students for information included the kardex which was referred to 57 times, 36 times concerning indirect patient care, and 21 times concerning direct patient care. Information was gained from patient charts 21 times, 12 times concerning indirect patient care, and 9 times concerning direct patient care. The assignment kardex was used 21 times to gain information in reference to indirect patient care 10 times, incidental information 7 times, and personal information 4 times. The ward library was used 13 times, 11 times for information concerning indirect patient care and 2 times for incidental information.

Information was obtained by students 103½ times in the 60 hours of observation. They received information concerning direct patient care 581 times, or 56.2 per cent of all information obtained. Information concerning indirect patient care was obtained 281 times, or 27.2 per cent of the total. Incidental information was obtained 130 times, or 12.6 per cent of the total. Personal information was obtained 42 times, or 4.0 per cent of the total.

Information was sought by the students 797 times. They sought information concerning direct patient care 458 times, or 57.4 per cent, concerning indirect patient care 192 times, or 24.1 per cent, incidental information 120 times, or 15.0 per cent, and personal information 27 times or 3.5 per cent.

It was inevitable that certain observations would be made that were not anticipated and which were not a part of the design of the study. It was noted that, although the clinical instructor was designated as being responsible for supervising and teaching the students, it was not possible for her to be there at all times during the students' assignment. This resulted in the instructor's responsibilities being shared by other personnel.

It was also noted that the amount of supervision was further diluted by the spread of hours during which the students were assigned to practice.

It was further noted that the nature of assignment, supervision or informal ward instruction for the degree students presented no noticeable differences from that provided the diploma students. Moreover, the presence of four different levels of students in the same practice area, even though assigned for different purposes, added to the complexity of supervision.

CHAPTER IV  
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of the Study

The purposes of this study were:

1. To determine the sources of information sought and obtained by student nurses in the clinical area.
2. To determine the type of information sought and obtained from the various sources.

These purposes evolved from two hypotheses: (1) the student nurse receives sufficient information in the classroom to enable her to function adequately in the clinical practice area, and (2) the student nurse receives all the needed information from persons primarily responsible for her instruction and supervision.

In accord with criteria established from literature which dealt with the development of sound programs in nursing, one unit of a medical department in a general hospital was selected as the site for the study. After administrative clearance was obtained, explanations of the proposed study were made to all personnel concerned, though the exact nature of the study was not revealed to the students because of the possibility of distortion of data.

Data for the study were obtained through a series of one-hour periods of observation of student nurses. Observations were planned to permit 15 hours of observation of students at each of the four

educational levels represented in the medical unit, or a total of 60 hours. The pattern of observations was designed to include observations of students of each group during each of the hours included in the study (7:00 to 11:00 a.m. and 3:00 to 7:00 p.m.) Because of the varied hour schedules of students and the need to sample each group at various hours, it was decided to observe any available student of the educational level designated for observation according to the prepared schedule. The students who participated in the study included three seniors, five juniors, six sophomore collegiates, and eight preclinicals, or a total of 22 students. Observations extended over a period of two and one half weeks, or a total of 60 hours.

In an effort to ascertain whether the conditions of the study were representative of the usual situation in the medical department, the following procedures were done: a study of the staffing pattern for the unit during the six months prior to the study, a determination of the average number of nursing hours per patient per day, a determination of the average patient census, a study of the frequency of change in the hours students were assigned to clinical practice, and a comparison of staffing and nursing hours of the unit of the study to other units of the medical department.

The practice of assigning students of different educational levels to the same area for clinical experience was found to be a common practice in diploma schools of nursing.

Preceding the actual observations, the investigator underwent a trial practice period of four hours for the purpose of gaining skill in recording and testing the form designed for recording observations.

Recorded data were classified in four categories devised to define the type of information obtained from the various sources.

Data may be summarized as follows:

1. Information was obtained 1034 times by all students included in the study. The seniors received information 285 times, juniors 259 times, sophomore collegiates 242 times, and pre-clinical students 248 times.
2. Information concerning direct patient care represented 56.2 per cent of all information obtained, that concerning indirect patient care 27.2 per cent, incidental information 12.6 per cent and personal information 4.0 per cent.
3. Of total information obtained, students sought information in 797 instances. The distribution of information sought in each category corresponded closely with that of all information obtained. Information concerning direct patient care represented 57.4 per cent of all information sought, concerning indirect patient care 24.1 per cent, incidental information 15.0 per cent, and personal information 3.5 per cent.
4. Students received approximately one half, or 49.1 per cent of their information from the patients, 13.6 per cent from other students, 10.8 per cent from the head nurse, 7.8 per cent from staff nurses, 3.5 per cent from aides, 2.3 per cent from instructors, and 2.1 per cent from all other persons. Other sources (including kardex, patient charts, assignment kardex and ward library) comprised 10.8 per cent of information obtained.

5. Only 13.4 per cent of total information was obtained from persons directly responsible for the teaching and supervision of nursing students. Of this amount, 10.8 per cent was obtained from the head nurse, 2.3 per cent from the instructors, and .3 per cent from the supervisor. Head nurses supplied information to students approximately five times as frequently as did instructors. However, information from the instructor usually was directly related to student learning, while that obtained from the head nurse related to service needs as well as student learning.
6. Staff nurses, who functioned as section leaders in this hospital and thus were responsible for patient care within their assigned sections, supplied 7.8 per cent of information, approximately three-fourths as much information as supplied by the head nurse and approximately three and one half times that provided by the instructors.
7. It was found that all students received most of the information concerning direct patient care from the patients. Senior students received all other types of information most frequently from the head nurse. Junior and sophomore students obtained all information other than that concerning direct patient care most frequently from other students. Preclinical students obtained information concerning indirect patient care and incidental information most frequently from the patient, while they obtained personal information most frequently from other students.

8. The nature of questions to the patients indicated that much information was subjective and therefore appropriately gained from the patient. Though some of this could be obtained from other sources, such questions were helpful in the establishment and maintenance of rapport with the patient. Obviously many such items of information were obtained for the purpose of showing personal interest in the patient and his wishes. In only a few instances did students seek instructions from patients who were more familiar with the techniques than the student herself. Therefore it would seem that most information obtained from patients was not concerned with the theory or technique of nursing but became highly significant when viewed in terms of contributing to the depth of understanding the patient and the nature of his illness.
9. In order of frequency of all information obtained, the persons providing information included the patient, other students, head nurse, staff nurse, aide, instructor, doctor, other department personnel, supervisor, dietary maid, licensed practical nurse, ward clerk, maid, and visitor. Other sources utilized for information, in order of frequency, included the kardex, patient charts, assignment kardex, and ward library.

#### Conclusions

The purposes of the study were fulfilled in that the data have been obtained relative to (1) the sources of information sought and obtained

by student nurses in the clinical area, and (2) the type of information sought and obtained.

Since this study was restricted to one area, it cannot be generalized that these findings would apply to other clinical practice areas with different staffing patterns or that findings would be the same with another group of students. However, from this study it may be concluded that:

1. Classroom instruction alone could not anticipate all of the information students needed; in order to provide competent nursing care much information was obtained in the patient's environment. Hence hypothesis #1 as stated on page 3 of this report is disproved. These conclusions are consistent with various statements found in the literature.
2. All students found it necessary to obtain information from a variety of sources. Furthermore, much information was forthcoming spontaneously. Therefore hypothesis #2 is disproved.

These conclusions were substantiated by the fact that:

1. Information obtained by students during this study included that information directly related to student learning, that customarily asked of patients to keep informed of their needs and feelings, that related to adjustment to the environment, and that information which meets personal needs.
2. There was a tendency for students to seek information from the most available source. If this information seemed unsatisfactory to the students, they usually went to a person with more authority. No attempt was made to ascertain if the



students had a clearly defined concept of their relationship to the clinical instructor and the head nurse.

3. There was little difference in the total amount of informatics obtained by students at various educational levels, the frequency of sources and categories of information reflecting to some extent variations in the nature of the student's assignment.
4. The amount and kind of information obtained by degree students was found to be no different than that obtained by diploma students. In this situation the degree students functioned under the same instructors, supervisors, and head nurses, with the same type of assignments as the diploma students.
5. The length of weekly assignment varied for each educational level; this in turn diluted the nature and extent of supervision and necessitated students carrying out some assignments when no instructors were available. This was particularly evident after 3:00 p.m. The students were the responsibility of the clinical instructor, yet there were many hours when she was unavailable at the time of the study. The head nurse shared this responsibility and was consistently available. Accordingly, students went to either the head nurse or the clinical instructor for information.
6. Students in this school of nursing appeared to be receiving adequate instruction and information to insure learning since graduates of the school have been consistently successful in

passing the National League for Nursing Test Pool Examinations used for state licensing purposes.

Though not a part of the design of the study it was further concluded that:

7. There were no findings that would suggest an extensive curriculum revision.
8. The presence of four different educational levels of students in the same setting added to the complexity of supervision and teaching despite the fact that each level was there for a different purpose. In the future the supervision may become less complex since the degree students will be prepared elsewhere.

#### Recommendations for Further Study

It is recommended that:

1. This study be repeated in the same setting with a different pattern of student assignment (i.e., only one educational level and a shorter weekly assignment all of which is directed and supervised by the clinical instructor). Interesting contrasts to the current findings might be revealed.
2. It might be well to repeat the study in the same setting using two patterns of student assignment, one the existing pattern, the other a new design. By designating a control group for each pattern, an experiment could be carried out to determine the effectiveness of one assignment pattern versus the other.

3. Studies be made of students' opinions concerning their choices of sources of information, including such factors as availability, accuracy, channels of communication, and interpersonal relations in order to discover reasons for tendencies to seek information from certain sources.

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## APPENDIX A

## LETTER TO DIRECTOR OF NURSING

6606 N. E. Rodney Avenue  
Portland 11, Oregon  
February 11, 1959

Dear \_\_\_\_\_:

In partial fulfillment of requirements for a Master of Science Degree at the University of Oregon Medical School, School of Nursing, I am preparing a thesis based on the determination of sources of information obtained by student nurses while assigned to nursing practice in a clinical area. This study will include a planned series of observations of the students in one clinical area.

I wish to request the privilege of conducting this study in the medical area of \_\_\_\_\_ Hospital. I have chosen this hospital and the medical area because of the opportunity provided to observe students in both the diploma and degree programs, my own familiarity with the environment, and the congenial atmosphere and cooperative attitude of the staff.

Your interest and cooperation in this project will be appreciated very much. When the study is completed, the results will be made available to you.

Sincerely yours,

(Signed) Marion Kelsven



## APPENDIX B

## LETTER FROM DIRECTOR OF NURSING

February 20, 1959

Dear Miss Kelsven:

We shall be happy to have you use \_\_\_\_\_ Hospital as the research laboratory for your thesis. The topic you have selected is both interesting and challenging and your conclusions will be of interest to us too, I am sure.

If there is any way in which we can be of assistance to you in your project, please let us know.

Very sincerely,

Director of Nursing

## APPENDIX C

## SAMPLE OF OBSERVER'S RECORD

Student A Assignment Section Leader Date 3/2/59  
 Class Sophomore Hour 7:00 to 8:00 a.m. Day of Study 1

Time	Source	Category	Activity	Sought
7:00	St	2	Listen to report	
13			Chart	
20	K	2	Check Kardex for assignment	X
22	Rn	3	What happened to patient?	X
26	Rn	2	Interpretation of order	X
29	St	3	Inquire identity of student	X
	Pt	1	How are you?	X
30	Pt	1	How are you?	X
31	Pt	1	Inquire how patient is	X
	Pt	1	Inquire how patient is	X
32	Pt	1	Inquire how patient is	X
	Pt	1	Inquire how patient is	X
33	Pt	1	Inquire how patient is	X
34	Pt	1	Observe patient for condition	X
	Pt	1	Listen to patient complaint	
35	Rn	1	Can give treatment early?	X
37			Give treatment	
39	K	1	Check Kardex for order	X
40	WL	3	Read requisitions and reports	X
42	WL	3	Read bulletin board	X
43			Wait	
46			Carry breakfast tray	
48	Pt	1	Want bed and stand raised?	X
			Carry breakfast tray	
	Pt	1	Shall roll up bed?	X
	Pt	1	How is breakfast?	X
50			Carry breakfast tray	
52	Pt	2	Patient tells about move to this room	
54			Carry breakfast tray	
55	St	4	Are you off tomorrow?	X
56			Carry breakfast tray	
56			Instruction to preclinical student	
57			Heat water for tea	
58			Carry breakfast tray	
59	Pt	1	Are you hungry?	X
	Pt	1	Like coffee?	X
	Pt	2	Patient tells that stitches were removed	

## APPENDIX D

SAMPLE OF OBSERVATION SCHEDULE--FIRST WEEK<sup>a</sup>

Time	Monday	Tuesday	Wednesday	Thursday	Friday
7-8 a.m.	Sophomore A		Preclinical B		Senior I
8-9 a.m.		Preclinical F	Senior I		
9-10 a.m.	Preclinical B	Sophomore G		Senior I	Senior I
10-11 a.m.	Sophomore A		Senior I	Preclinical H	Sophomore K
3-4 p.m.	Junior C	Preclinical H	Junior J		Sophomore L
4-5 p.m.		Junior C	Preclinical F	Junior J	Sophomore A
5-6 p.m.	Junior D			Preclinical E	Junior D
6-7 p.m.	Preclinical E	Junior D	Junior J	Preclinical B	Sophomore L

<sup>a</sup>Blank spaces in the schedule indicate that either students were not available for observation or that observations were not needed during these hours.

## APPENDIX E

## ABBREVIATIONS USED FOR SOURCES OF INFORMATION

Sup	-	Supervisor
CI	-	Clinical instructor, nursing arts instructor
HN	-	Head nurse, assistant head nurse and charge nurse
RN	-	Staff nurse
St	-	Student nurse
LPN	-	Licensed practical nurse
A	-	Aide or orderly
WCl	-	Ward clerk
M	-	Housekeeping maid
Dm	-	Dietary maid
Pt	-	Patient
MD	-	Doctor
OD	-	Other departments
V	-	Visitor
Alr	-	Assignment kardex
K	-	Kardex
Ch	-	Patient chart
WL	-	Ward library

APPENDIX F  
INTERVIEW GUIDE

1. In how many diploma schools of nursing have you served as a faculty member? \_\_\_\_\_
2. In these schools of nursing were students at more than one level of educational achievement assigned to the same clinical area simultaneously? \_\_\_\_\_
3. If so, in how many of these schools was this method of assignments utilized? \_\_\_\_\_
4. How many years of experience does this represent? \_\_\_\_\_

Typed by  
Beverly D. Kalsven