1947

A survey study of the clinical facilities in medical and surgical nursing

A SURVEY STUDY OF THE CLINICAL
FACILITIES IN MEDICAL AND
SURGICAL NURSING
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Service Paper

A SURVEY STUDY OF THE CLINICAL FACILITIES IN MEDICAL AND SURGICAL NURSING

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(B.S., in Nursing Education, St. Louis University, 1943)

In partial fulfillment of requirements for

the degree of Master of Science in Nursing Education

1947

First Reader:

Second Reader:

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CHAPTER I

THE PROBLEM

Introduction

A study of the evolving developments of nursing education during the past thirty years reveals a growing tendency on the part of institutions of higher learning to consider nursing as a fundamental department of knowledge and as such to be worthy of being included in any comprehensive educational program.[1]

Nursing education and all the problems involved in building the curricula which will develop the professional type of nurse, will challenge the ability of the most astute scholar. The development of new techniques and the improvement of the old, and a constant alertness to improve the actual care of the sick by comprehensive knowledge and understanding of the principles of total patient care challenge the nursing educators to produce the kind of program that will provide competent nurses who can give the essential service for the welfare of mankind.

The fact that learning is based on doing has long been accepted in educational circles as a basic law for the acquiring of knowledge. Thus total patient care can only be learned where the patient is ---

1 Roy J. Defferrai, "Schools of Nursing: A Part of the Educational System of the Country", Forty-Fifth Annual Report of the National League of Nursing Education, (1939) p. 115.

i.e. in the clinical areas.

Today much attention is being directed toward the development of acceptable and objective bases for evaluating the potential educational experiences in such a practice field.

Some methods for evaluating clinical experience are:

a. Basing the evaluation on the length of stay on a service, for example, 16 weeks on a medical or surgical nursing service

b. In addition to the above basis for evaluation the daily average of patients on a service is an important factor

It has been assumed in the past, that because a student had spent a specific length of time on a given clinical nursing division that she automically received a well-rounded experience in the nursing situations peculiar to that division. The fallacy of such an assumption is self-evident and the possibility of all students receiving adequate experience in the key conditions peculiar to each nursing service is, to say the least, nebulous and uncertain.

c. The content of selected student experiences in terms of student objectives, rather than time spent on a clinical nursing division would seem the more valid method of measuring the educational values inherent in the clinical practice field.

> "The purpose of the activities pertaining to the curriculum, as thus conceived, is to select the student experiences essential to the preparation of individuals for the practice of nursing, and to organize these experiences for efficient use in the preparation of students for the practice of nursing." 1

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1 Committee on Administration in Schools of Nursing, Fundamentals of Administration for Schools of Nursing,(New York: National League of Nursing Education, 1940)

In an attempt to standardize and develop the suggestion contained in the above quotation the National League of Nursing Education has developed a record form containing a list of the various key conditions grouped under their respective anatomical systems whereby the student may record specifically her experience in these conditions. This is a step forward toward establishing a definite curricula content for the clinical experience of the student nurse. As yet no satisfactory basis has been devised for giving credit on the college level in the clinical practice field and there appears to be little if any agreement between schools of nursing on the subject of clinical evaluation.

Statement of the Problem

This study is an attempt to make a scientific analysis and evaluation of the clinical facilities provided by a hospital school of nursing. Specifically, the investigation is concerned with the incidence and distribution of diseases on the general Medical and Surgical services.

In order to discover the exact quantity, quality and distribution of these key conditions the necessity for scientific analysis of available clinical material became evident. The clinical practice of the student is influenced by two basic factors, the variety and the distribution of the clinical material available for experience over any given period of time. As Pfefferkorn so tersely says:

> It is not enough to say that students should have two or three months of this or that nursing service without finding out exactly of what the practice field consists. 1

1 Blanche Pfefferkorn, "Let Us Look at Our Clinical Services", American Journal of Nursing Vol. XXXV (February, 1935), p. 162.

The truth of this statement is evident even to the casual reader.

The content of the student's clinical curriculum consists primarily of patients with various types of disease conditions, therefore investigation of this area would seem to be the logical method of approaching this problem.

Valid evaluation of the clinical experience of the students in a given school of nursing depends upon an exact analysis of the content of that clinical experience in terms of the variety and amount of disease entities available for student practice and the comparison of these findings with some recognized acceptable criteria. A discussion of the application of these statements will be found in Chapter IV.

Definition of Terms

For the purpose of this study the terms defined below will be assumed to have the following meanings:

1. Clinical experience - the organization of essential knowledge, skills, ideals, and appreciations developed in caring for the sick.[1]

2. Clinical facilities - the variety of medical and surgical conditions found in a general hospital.

3. A clinical division, clinical service, nursing service, and ward will be considered synonomous terms - in this study since anyone of those terms represents a hospital department where patients receive bedside nursing care.

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1. Catherine S. Bastin, "Teaching Procedures in Nursing From the Viewpoint of Clinical Experience," Thirty-Seventh Annual Report of the National League of Nursing Education. (1931), P. 182.

4. Practice field - any clinical nursing service to which student nurses are assigned for the acquisition of essential knowledge, skills, attitudes and appreciations necessary in the care of the sick.

5. Nursing days, practice days, and patient days may be considered synonomus terms, for the purpose of this study, since they represent the number of days the patient is available for student practice.

6. Disease entity - a disease as it exists and as it is recognized as distinct from all other diseases.

Limitation of the Problem

The problem as it has been defined has several distinct limitations. It does not attempt to evaluate the complete clinical experience of the student. First; the study is limited to the practice fields of medical and surgical nursing only and does not include a specific investigation of the Out-Patient department except an occasional reference to it as a source of additional educational experience. Secondly; the study of incidence and distribution of disease is confined to those conditions of the Master List of Disease Conditions considered essential or highly desirable for student practice because of the educational values inherent in them.[1]

Thirdly; the study is limited to one school of nursing, therefore the conclusions herein drawn cannot be extended to other similar schools.

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1 Committee on Curriculum, A Curriculum Guide for Schools of Nursing (New York: National League of Nursing Education, 1937), pp. 572-87.

CHAPTER II

THE PROCEDURE

The Materials

The materials used to solve this problem were:

1. The related literature and bibliography.
2. Clinical records of X Hospital, (September 1945 to September 1946).
3. Clinical practice sheets of X Hospital School of Nursing.

The Method

After the survey of the related literature was completed, the collection of data was begun. The Master List of Disease Conditions to be included in medical and surgical nursing was examined and it was decided to limit the problem to a study of the disease entities in the practice fields of these nursing services which are considered either essential or highly desirable as student experience.

Since an awareness of the distribution of these experiences throughout the year is equally as important as the total variety of cases, each diagnosis was tabulated under the month of admission to the hospital. The number of days each patient remained in the hospital was also recorded, so that an average length of hospital stay for each diagnosis might be found. A line drawn under each surgical admission made it possible to determine the number of both surgical and medical admissions under each diagnosis during the year.

The data were collected and tabulated under the anatomical system in which they occurred, e. g., respiratory, circulatory, gastro-intestinal and endocrine. Thus a frequency table of each diagnosis to be considered, together with the month of admission and length of hospital stay, was obtained. The tables used for tabulation of the data are included in the Appendix.

The data, covering the period of research, September 1, 1945 to September 30, 1946, were then arranged in tables under the anatomical system, showing the total number of admissions in each disease entity recommended as essential or highly desirable in the Master List of Disease Conditions, as well as the total number of these admissions for the year 1945-1946. Also, these tables indicated the total and average number of patient days, together with the distribution curve of patients within each diagnosis.

The formula as given in the Manual of the Essentials of Good Hospital Nursing Service for evaluating the adequacy of any nursing service as a practice field for students was then applied to the data in each clinical nursing service.[1] In addition the number of patient days available per student in each disease entity was found. The two evaluations were then compared and the implications of each discussed.

The final step involved a summary of the outstanding findings of the study, the forming of conclusions drawn from these findings and the

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1 Committee of the National League of Nursing Education and Division on Nursing of the Council of the American Hospital Association, Manual of the Essentials of Good Hospital Nursing Service, (New York: National League of Nursing Education and Chicago, Illinois: American Hospital Association, 1945), p. 43.

making of recommendations.

CHAPTER III

THE RELATED LITERATURE

Philosophical Contributions to the Field

The Philosophical Contributions to this field seem to have confined themselves to pointing out the need for definite criteria of achievement and content as a basic requirement for the evaluation of any clinical experience, but particularly that on a college or university level.

In 1936, Beck after comparing the merits of hospital and collegiate schools of nursing concludes that a college or university failing to set up criteria for nursing practice does a poorer piece of work than many hospital schools have done in the past, even though the university or college school may fulfill its obligation in providing the theoritical material required for nursing.[1]

In the succeeding year Gardiner suggested that collegiate schools strive to evaluate clinical practice for the purpose of giving college credit for the clinical experience of the nurse. Furthermore, she intimates that such an evaluation should be based on a known clearly stated set of criteria which would express the units of credit agreed upon by the collegiate schools in nursing. The bases for this accredit-

1 Sister Mary Bernice Beck, "Hospital or Collegiate Schools of Nursing," American Journal of Nursing, (July, 1936), Vol. XXXVI.

ation should be so plainly presented that other schools could follow the pattern and also allow credit for clinical experience according to their own system of crediting.[1]

Soule follows this same trend of thought in her discussion of the principles upon which the university school of nursing should be constructed. Paramount among these fundamental principles is a well organized curriculum with the university responsible for the teaching program and with credit for all courses and practice.[2]

The analysis of the problem of evaluating the clinical experience of the student made by Sister Mary Therese, in 1938, sets up the following bases as essential for granting credit:[3]

1. An adequately prepared teaching supervisor in each clinical department in which the student gains experience.

2. Systematic inter-departmental and intra-departmental student rotation.

3. A planned clinical teaching program in each clinical division in which the student gains experience.

4. A record of all formal ward teaching to include:
   a. Type of teaching (clinic, morning conference or ward class.)
   b. Subject
   c. Teacher
   d. Time

Apparently in analyzing this problem the content of the clinical

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1 Lillian A. Gardiner, "Measuring the results of Clinical Teaching". Trained Nurse and Hospital Review, (September 1937), Vol. LXLIX, pp.275-80.

2 Elizabeth A. Soule, "Building the University School of Nursing", American Journal of Nursing, (May, 1938), Vol. XXXVIII, pp. 583-87.

3 Sister Mary Therese, "Clinical Teaching", Trained Nurse and Hospital Review, (July, 1938), Vol. CI, pp. 65-68.

practice is either assumed or ignored. It would seem that in order to establish valid criteria it would be necessary to state the practice material available, in terms of disease entities, including the time which these experiences would be available to all students.

At the forty-fifth annual convention of the National League of Nursing Education in 1939 Groves pointed out the many problems involved in post-graduate education for nurses, and stressed the need for some method of granting credit for clinical experiences, even in those schools that do not have university or collegiate affiliation, so that institutions of higher learning may have some indication of the credit value assigned the clinical experience by their respective schools of nursing from which these students come.[1]

Historical Contributions to the Field

The first of the historical contributions took the form of a survey under the auspices of the Rockerfeller foundation in 1918 conducted by Josephine Goldmark to determine "the status of public health nursing in the United States and the education desirable for training the needed personnel."[2]

In this study Goldmark found that although there were minimum requirements for the various services, there was no evidence that the time on these services were equally distributed. Some students receiving barely the minimum experience while others received much more

1 Sara M. G roves, "Problems Related to Post-Graduate Education", Forty-Fifth Annual Report of the National League of Nursing Education, (1939) pp. 175-79.

2 Josephine Goldmark, Nursing and Nursing Education in the United States. "Report of a Survey;" (New York, The Macmillan Company) 1923.

than this minimum requirement.

In 1929 the First Grading Study of Nursing Schools was started with the purpose of studying "ways and means of insuring an ample supply of nursing service of whatever type and quality is needed for adequate care of the patient at a price within his reach."[1]

In 1932 a Second Grading of Nursing Schools was completed. This latter study while it showed a general improvement in standards over those of the First Grading Study, the same discrepancy in service assignment was noted.[2]

Pfefferkorn and Rottman, in 1932 were the first to make a study of this kind. The medical divisions at Bellevue were used to provide the experimental material for the study. The result of this investigation showed only the total quality and quantity of diagnosis available for student practice in this hospital during the period studied. The factor of distribution was ignored, and since the investigation was confined to the medical divisions alone, the authors were unable to make any comparisons with other clinical nursing services in the same institution. However this work was the beginning in the trend toward the scientific method of analyzing the clinical practice field of the student nurse.[3]

In 1934 Johns and Pfefferkorn made a similar study that was published by the Committee on the Grading of Nursing Schools. The results of this

1 Committee on the Grading of Nursing Schools. The Second Grading of Nursing Schools, 450 Seventh Avenue, (New York,) p. 3.

2 Ibid.

3 Blanche Pfefferkorn and Marion Rottman, Clinical Education in Nursing, (New York: The Macmillan Company, 1933)

investigation are based on disease incidence in six general hospitals, three Children's hospitals, fifteen Public Health Associations, eight Departments of Health, and the statistics of twenty official registries for graduate nurses caring for the sick in their homes. A summary of the findings indicated that there was a predominence of surgical conditions over medical conditions in these institutions. In addition it was noted that there was a direct relationship between the adequacy of any clinical service and the size of the hospital. Although a limited number of hospitals were studied, it was felt that they were sufficiently representative in the trends indicated. From this study the authors proceeded to draw up a basic list of disease conditions which they felt should be considered in constructing the curriculum in schools of nursing, because these conditions occurred most frequently.[1]

Pfefferkorn, in 1935 as director of the Department of Studies for the National League of Nursing Education made a survey of the clinical divisions of seven hospitals conducting schools of nursing and found the same preponderance of surgical conditions over medical conditions as was earlier discovered by Johns. In the seven hospitals studied, one hospital had about the same number of surgical as medical admissions, two had about twice as many surgical as medical patients, three had four times as many surgical as medical patients, one hospital had five times as many surgical as medical patients in the student practice field. This study did not classify diagnosis in any way except as medical or surgical admissions, neither did it concern itself with the factor of distribution

[1] Ethel Johns and Blanche Pfefferkorn, An Activity Analysis of Nursing (New York: National League of Nursing Education, 1934).

over the period studied.[1]

A revision of the basic list of disease conditions submitted by the authors of the Activity Analysis of Nursing was undertaken, in 1937 by the Curriculum Committee in an effort to determine the conditions which should be included in the organized courses of instruction in the basic professional curriculum, as well as those that should be included in the students clinical experience. The tentative Master List of Disease Conditions submitted by this committee purports to list all conditions considered essential from the viewpoint of nursing care and experience. These conditions, on the List, are preceeded by double stars (**pneumonia). Certain other conditions considered highly important if available are single starred on the list (*rheumatic fever). Experience in the remaining conditions should be provided whenever possible. The committee recommended that studies regarding the availability of at least those conditions, which are double starred as essential, be made in all schools of nursing. Analysis of this type should include details of the seasonal incidence, number of cases yearly, and types of experience offered.[2]

The first survey of the basic professional curricula in a collegiate school of nursing to mention methods of evaluating clinical experience on a credit basis is that of Petry in 1937. Petry reports that in all instances where credit was given for nursing practice, that credit was

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1 Pfefferkorn, "Let Us Look At Our Clinical Services", op. cit., pp. 162-69.

2 Committee on Curriculum, A Curriculum Guide for Schools of Nursing op. cit., pp. 572-87.

"blanket" in character and not allocated to specific practice fields. In the remaining schools clinical practice was not considered in the process of evaluation. Many schools apparently were seeking for some valid basis for indicating nursing experience in terms of College credit, but at that time had not arrived at a satisfactory plan. In a few cases, a policy established by the university for allowing credit for other types of field work was extended to cover nursing field work or practice. In summarizing the data on methods of evaluating on a credit basis Petry concluded that there is an absence of any real criteria of qualitation requirements in the way of systematic methods of student rotation through the clinical departments.[1]

In 1940 Zalesky made a follow-up of the Petry study. This study was limited to those collegiate schools of nursing stating that College credit was offered for clinical experience. Eight schools were included in this group, three had to be eliminated from the study because it was impossible to obtain information from them. Analysis of the five remaining schools showed plainly that there is still a wide divergence in the expression of clinical experience in terms of credit units. There seems to be a tendency to base evaluation in terms of hours spent on a nursing division rather than in terms of experience content. Only one school allocated credit to each department in which the student gains experience. It was significant, also that only one school requires a specified number of days practice in the various disease entities as a basis for granting credit for the clinical program. Zalesky concludes

1 Lucille M. Petry, "Basic Professional Curricula in Nursing Leading to Degrees", American Journal of Nursing (March, 1937), Vol. XXXVII, pp. 287-97.

that there is still a wide range in the amount of credit offered for clinical experience in the schools studied; there is even a greater difference in the basis upon which such credit is granted, and that there is an apparent lack of definite criteria behind these pioneer attempts to assign credit value to the clinical experience of the student nurse.[1]

In 1945 The Manual of the Essentials of Good Hospital Nursing Service was revised by the Division of Nursing of the Council of the American Hospital Association and a Committee of the National League of Nursing Education in an effort to standardize the nursing load of the nursing personnel. The formula herein suggested has been used as a criteria for service capacity in this study.[2]

The literature reveals that there exists a need for schools of nursing to investigate their individual clinical practice fields and in the light of these findings to set up definite criteria under which they grant credit for the clinical experience of the student. Furthermore, with one exception, there is an absence of any criterion with regard to variety and length of disease entity practice in those schools of nursing granting credit for such experience. Therefore, there would seem to be need for research in this area.

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1 Ann M. Zalesky, "The Evaluation of Clinical Experience on a Credit Basis: A Study of Some Current Methods in Its Evaluation",(Unpublished Study in Nursing Education, St. Louis University School of Nursing, 1940).

2 Committee of the National League of Nursing education and division on Nursing of the Council of the American Hospital Association, op. cit., 1945.

CHAPTER IV

INCIDENCE AND DISTRIBUTION ON A MEDICAL AND SURGICAL NURSING SERVICE

The mass of data gathered for the study was partially organized, in the process of collection, by means of the frequency tables previously described. In order to facilitate its presentation for interpretation, tables were constructed showing the incidence and distribution of disease on each clinical nursing service. In the medical and surgical departments the diagnosis are presented for discussion under each body system in which they occur.

One of the objectives of this study was to obtain a statement of the disease entity experience possible for student nurses at "X" School of Nursing on the basis of the findings herein submitted. Thus it was necessary to measure the adequacy of the nursing service as a practice field for the student both in terms of the number of patients on a service and the number of students using that service as an experience unit.

As a solution to the latter problem the formula given by the National League of Nursing Education in the Manual of the Essentials of Good Hospital Nursing Service for evaluating the adequacy of a clinical nursing service was studied.[1]

1 Committee of the National League of Nursing Education and Division on Nursing of the Council of the American Hospital Association, op. cit., p. 43.

This formula has been accepted as the only known criteria for determining the number of students which can be accomodated on a nursing service. Expressed as a formula the method is as follows:

$$\frac{\text{Daily average patients} \times \text{Average bedside hrs. per pt. in 24} \times \text{Days in week}}{\text{Weekly hours schedule of bedside nurses}} = \text{No. of bedside - nurses - needed}$$

Applying the data of this formula to a female medical division at "X" Hospital.

$$\frac{31 \times 3.5 \times 7}{40} = \frac{759.5}{40} = 19 \text{ nurses}$$

An analysis of this formula reveals that it appears to have very little discriminative value in determining the adequacy of a clinical service as a practice field for students from the viewpoint of nursing education. The evaluation of experience provided by any nursing service under this method would seem to be far from the true picture since it is conceivable that the number of patients available for practice may be entirely adequate, but the variety or types of experience may be sadly limited. In brief this formula does not seem to measure the variety or type of experience which exist in any given nursing service.

This formula was of great value for determining the ratio of patient days per student in each disease entity to the data of this study. The number of students who could obtain experience based on the daily average of patients in both medical and surgical services was found. In medical experience the number that could be accomodated was 19 students per week; in surgical experience the number was 37 students per week. Taking the

minimum requirements of the Massachusetts State Board of Nursing for Medical and Surgical services 16 weeks, this gives 3.25 complete rotations per year on each service, each rotation consisting of 19 students respectively, this would postulate that 62 students per year should be able to obtain medical experience. The criteria of the National League of Nursing Education of 25 days experience in each condition required by the Master List has been used in evaluating these services.[1]

In order to obtain a more complete picture, one which would include the number of patient days available in each of the disease entities per student, a supplementary device seems needed if the school wishes to obtain a valid picture of the clinical nursing experience offered to its students. Fundamental to this would be a study of the incidence and distribution of at least those conditions listed in the Master List of Disease Conditions as essentials for student experience.[2] The study should include the medical and surgical services for a period of at least one year in order to provide for seasonal variation.

When the total number of patient days available in each disease entity is obtained for the period studied the results may be expressed in terms of the number of patient days of practice available for each student:

$$\frac{\text{Number of patient days in a given disease entity for year}}{\text{Number of students who must gain experience in this disease entity during the year.}} - \text{Maximum number of patient days available for practice per student in each disease entity}$$

In order to apply this formula, it is necessary to know the number

1 Committee on Records of the National League of Nursing Education, A Guide for the Use of the League Records, (1790 Broadway:New York,1943)p.6.

2 Committee on Curriculum, op. cit., pp. 572-87.

of students per rotation as previously stated on page 18, it was found that it was possible to rotate 19 students through this service.

Since these 19 nurses cover a 24° period of care there is a certain amount of overlapping of patients per nurses, thus evening and night nurses can be omitted in the figuring. Also since the students work only a 40° week, allowance must be made for days off. Thus in determining the ratio of patient to nurse in the specific disease entities, the number used in the development of the formula is 12 or 2/3 of 19. Transposing this to a yearly basis, it would mean 40 nurses or 2/3 of 62 nurses.

Applying this formula to the data from Table III of this present study we find that there are 2530 patient days available for practice during the year in the disease entity of **pneumonia, and having determined from a previous analysis that 40 students can gain experience in this disease entity during the year, the maximum number of patient days of practice per student will be found to be 63 days.

Maximum number of patient days available for practice per student in **pneumonia $\frac{2530}{40}$ 63 days

The results of this equation would immediately show the disease entities in which a deficiency of patient days existed. In addition to deficiency in disease entities, these results would seem to have some value as a guide to establishing a minimum number of patient days of practice in at least those conditions considered essential for student experience, since this evaluation would be based on existing facts rather than upon wishful thinking. This method would seem to be of more educative value than that of recording clinical experience in terms of time

spent on a clinical division since it emphasized the qualitative as well as the quantitative factors which contribute to the adequacy of a nursing service as a practice field for student nurses.

However, this ratio of patient days per student has an inherent limitation. This method does measure the distribution of patient days among the disease entities as they appear in the tables. It does not, however measure the variations in distribution of patient days in each disease entity over the year. For instance, in determining the number of patient days available per student in the disease entity **pneumonia, as previously explained, the findings must be interpreted in the light of the fact that there was present a fairly even distribution of **pneumonia cases over the year, as indicated in this table by the number of monthly admissions. The significance of the number of admissions per month is, in turn dependent upon the average number of days such patients remain in the hospital. Thus, the mere mathematical findings derived by using the formula is educationally significant only in terms of these modifying factors.

Table I presents the incidence and distribution of disease conditions of the Gastro-Intestinal System as found on the medical and surgical divisions of "X" Hospital.

From the fact that 1281 of the total admissions in this area are surgical patients it is apparent that this particular group of diseases furnished a practice field for the student which is chiefly surgical. The average patient with a disease of the gastro-intestinal system is hospitalized for about fifteen days; patients in the diagnosis of

Cholelithiasis show the highest average length of hospital stay.

There appears to be an excellent distribution of patient days available for practice in all conditions considered essential for practice with the exception of the diagnoses of Amebic and Bacillary Dysentery, Typhoid Fever, and Vincent's Angina. However, this lack of experience can be readily explained when one understands the progress made by the Public Health Department in research to control these diseases. Also, the advent of Chemotherapy has made great inroads in the occurrence of such conditions as Peritonitis and diseases commonly associated with certain diseases in this area, i. e.,acute and suppurative appendicitis and ruptured gastric and duodenal ulcers. Hence it can be assumed that scientific progress has done much to change the picture of Medical and Surgical conditions and that preventative measures are growing more and more important while actual occurrences of these conditions become less and less. The incidence of cancer in this area provides sufficient experience and since cancer of the gastro-intestinal tract is one of the major cause of death it would seem that the student would have adequate knowledge of the care of these conditions.

The high ratio of patients days of practice possible per student indicated in Table I would appear to be even more significant by reason of the excellent distribution over the year.

It is interesting to note that patients are not frequently hospitalized for treatment of such conditions as Dental Caries and Vincent's Angina.

This again is an indication of the health teaching over a period

of time. Periodic health examinations in schools and the formation of good health habits has done much to reduce the occurrence of these diseases. Special dental clinics have also tended to remove these conditions from the general hospital field.

The incidence and distribution of diseases of the respiratory system, as shown in Table II offer opportunity for many interesting observations. It is at once apparent that the practice field in respiratory diseases is overwhelmingly a medical one, since 375 of the 438 admissions were classified thus.

The average patient in this area remains in the hospital for sixteen days according to the data of the table.

There is apparently a trend for such diseases as Acute Rhinitis and Influenza to reach a peak during the months of November and January, while pneumonia seems to be most prevalent during September and November. Both bronchitis and pneumonia are fairly well distributed throughout the year. The factor of distribution over the year would appear to make the possibility of all students gaining experience in such conditions as laryngitis, pharyngitis and bronchiectasis, very small. Again the use of Chemotherapy has reduced the incidence of these diseases and removed them from the general hospital field.

Since the hospital does not accept Tuberculous patients for treatment, the experience here is mostly diagnostic.

The scarcity of experience in empyema pleurisy and tonsillitis may be explained by the use of Chemotherapy and the remedial use of Tonsillectomy which has not been recorded as it is not required on the

Master List.

The treatment of Hay fever is now regulated to a great degree by the use of pollen extracts which are administered by the physician in his office and in special clinics.

Comparing the number of patient days experience per student with the criteria of 25 days, it would seem that adequate experience in asthma, acute rhinitis, bronchitis, pleurisy, pneumonia and pulmonary tuberculosis could be received by the students. It is questionable whether experience in laryngitis, pharyngitis are essential since experience is offered in the more serious conditions. It is true that all conditions in the list of master diseases are distinct disease entities, however it is questionable whether each by reason of that fact merits to be considered essential for student practice. This would seem to be particularly pertinent with regard to the group of respiratory diseases submitted by the committee, for an analysis of these conditions reveals that very similar skills are involved in their nursing care. Hence the school would seem to be under no obligation to improve the practice field for each student in the nursing care of patients with the lesser respiratory conditions since these nursing skills can be acquired in the disease entities provided under other diagnoses. In the case of bronchiectasis greater knowledge of diagnosis and treatment of this condition has tended to eliminate this experience from the hospital; however, lobectomy of the lung is increasing in incidence and affords excellent experience in thoracic surgery.

The practice field in conditions of the circulatory system as presented in Table III is chiefly a medical one despite the fact that there appears to be a slight dominence of surgical patients with 440 of the 818 admissions being surgical. However, a glance at the table explains this situation since the surgical treatment of varicosities serves to swell this total. Further examination shows that the greatest distribution of cases lies in the medical field. The average patient with a circulatory disease remains in the hospital about twenty-seven days.

The diagnosis of Heart Disease is responsible for the majority of admissions and patient days of practice in diseases of the circulatory system. Arteriosclerosis and arterio-sclerotic heart disease also show a high percentage of admissions and of patient days available practice.

The ratio of patient days of practice per student nurse in arteriosclerosis, heart disease, hypertensive heart disease, phlebitis, varicosities and anemia would appear to be entirely adequate and is supported by a satisfactory distribution of admissions and patient days over the year in each instance. In the disease entities such as bacterial, congenital, rheumatic and syphilitic heart disease the yearly experience is practically nil. However, it is possible that these disease entities may be presented by reason of the fact that many patients who enter the hospital under other primary diagnosis may also receive treatment for these conditions during the same period of hospitalization. Obviously this lapse could be easily corrected if the physicians could be per-

suaded to specify the kind of heart ailment that is either primary or secondary instead of employing the general term heart disease.

Table IV indicates that there are only two conditions of the endocrine systems which are considered essential or highly desirable for student practice. The average patient in this area remains in the hospital for fourteen days. This group of diseases seems to offer valuable practice material in both the medical and surgical fields. It is interesting to note that diabetis is largely a medical condition while the treatment of hyperthyroidism is chiefly surgical. While there appears to be sufficient experience in hyperthyroidism, nevertheless the irregular distribution of these cases would seem to indicate that it would not be possible for all students to receive experience in this condition. The development of new medications and a greater understanding of the treatment of this disease entity has tended to reduce the admission of these cases and to concentrate them in the doctor's office.

This study reveals that the relationship between the numbers of patients admitted to the medical and surgical services included in the study is favorable, since of the 2,900 patients admitted 38% were medical and 62% were surgical patients.

CHAPTER V

SUMMARY AND CONCLUSION

The content of the clinical practice field of the student nurse in the areas of medical and surgical nursing, in a selected school of nursing, has been critically examined and evaluated.

The approach to the problem of evaluating the clinical experience of the student through a survey of the content of her clinical practice grew out of the review of related literature in which there appeared to be a recurring reiteration of the need for schools of nursing to investigate their individual clinical resources. The literature further indicates a growing tendency to look upon the clinical practice field of the student in terms of credit units. However, it appears that thus far the basis for granting credit for clinical experience has been the length of time the student spends in each clinical division. This approach seemed psychologically and educationally unsound, since it is conceivable that many students under such a policy, may complete their entire clinical experience without having gained practice in the nursing care of certain key conditions, or disease entities, which are commonly considered to be rich in providing opportunity for the student to acquire certain knowledge, skills, attitudes and appreciation.

A policy whereby a school decides upon certain selective experiences, in the form of disease entities, through which its students may acquire an integrate basic and advanced nursing knowledge, skills, attitudes and

appreciation in the care of the total patient is a much sounder basis upon which to grant credit for such experience. The soundness of this policy would appear to be appreciably reinforced if the school, in addition were able to indicate, on the basis of a scientific investigation of the incidence and distribution of disease on each of its clinical nursing services, and the number of days of practice it can offer its students in each of these selected experiences.

For these reasons an anaylsis of the clinical practice field of a selected school of nursing was undertaken in an effort to arrive at a statement of the actual number of days of practice this school can offer its students in each of those disease entities commonly agreed upon as having social and learning values for the student. The Master List of Diseased conditions submitted by the curriculum committee of the National League of Nursing Education was used as the best guide available at the present time for selecting disease entities around which typical nursing situations are built.

The incidence and distribution of these conditions considered essential or highly desirable for student practice in the clinical services of medical and surgical nursing were determined, and the formula in the Manual of the Essentials of Good Hospital Nursing Service for evaluating the adequacy of any nursing division as a practice field for students was applied to the data gathered in each nursing service.[1] In addition, the number of patient days available per student in each disease entity was computed. The findings of the two evaluations thus made were compared

1 Committee of the National League of Nursing Education and Division on Nursing of the council of the American Hospital Association, op. cit., 1945.

and it would seem that this formula, in each instance did not present a true picture of the educational content of the practice field provided by a nursing service since it fails to measure the variety of diagnoses represented therein. Its value, therefore appears to lie in the fact that it does determine the number of students necessary to care for a given number of nursing or patient days. On the other hand through a determination of the number of patient days of practice available in each disease entity per student nurse,certain strengths and weaknesses of each clinical nursing service were discovered which were not apparent when the formula was applied to this same data. Hence, it must be concluded that a more valid evaluation of a nursing service as a practice field for students can be had through the determination of the ratio of patient days per student in each disease entity.

As a result of such an analysis of the clinical nursing services at "X" hospital it is possible to state that "X" School of Nursing can, in general, offer its students at least 25 days of practice in those conditions considered essential for student practice using the Master List of Disease Conditions submitted by the curriculum committee as a tentative guide.

Thus, in all instances where the statement of a possible 25 days of practice in each disease entity departs from the suggested emphasis of the Master List of Disease Conditions, in this study, the reasons for the departure have been clearly set forth and the sources of substitute practice definitely indicated, so that any other school may readily understand the policy of this particular school in the matter.

At present "X" School of Nursing does not grant formal credit for experience gained by its students in the clinical field nursing divisions. Shoud the school, in the future, decide that it chooses to assign specific credit value to the student's clinical nursing practice it may point to the findings of this study as one of the bases, perhaps the most fundamental basis, upon which the school grants such credit.

The mere fact that the school is able to say that it can offer its students a minimum of 25 days of practice in those conditions considered essential for practice does not insure each student gaining adequate experience in the nursing care of patients in each of these disease entities. It remains for the school to so organize and check the clinical practice program of the students that it can be reasonably certain that each student actually receives approximately 25 days of practice in the selected experiences which the school may set as the minimum content of the practice field in each clinical nursing service.

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APPENDIX

TABLE I

TABLE I

INCIDENCE AND DISTRIBUTION OF

Conditions	Admissions per month							1945-1946	
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total									
Medical patients	67	63	63	79	88	57	62	52	65
Surgical patients	136	133	122	113	135	127	157	140	134
Abscess-Rectal	13	11	11	3	3	3	2	5	5
**Appendicitis	65	75	42	25	25	15	55	30	26
**Cholecystitis	20	30	33	7	8	7	11	17	6
**Cholelithiasis	18	22	19	3	4	5	8	18	3
**Colitis	13	8	5	2	5	2	4	-	1
Amebic Dysentery	-	-	-	-	-	-	-	-	-
Bacillary Dysentery	-	-	-	-	-	-	-	-	-
Enteritis	6	3	3	1	-	1	8	3	-
Typhoid fever	-	-	-	-	-	-	-	-	-
**Hemorrhoids	25	17	19	7	5	5	5	8	9
**Hernia Femoral	3	-	1	1	3	2	1	2	1
Inguinal Hernia	25	19	17	10	16	21	24	24	19
Ventral Hernia	7	4	2	-	2	-	1	1	1
**Peritonitis	10	4	-	6	-	-	2	1	1
**Duodenal Ulcers	1	12	11	4	4	3	9	5	2
Gastric Ulcers	6	-	4	5	8	7	7	5	2
*Vincent's Angina	-	-	-	-	-	-	1	-	-
*Intestinal obstruction	3	-	5	-	1	-	2	3	1
*Dental Caries	-	-	-	-	-	-	-	-	-
Neoplasms	5	8	5	11	6	1	-	1	-

CONDITIONS OF THE GASTRO-INTESTINAL SYSTEM

June	July	Aug.	Sept.	Total number of patients		Total number of patient days		Patient Days per student	
50	50	59	65						
149	150	109	149	Med.	Surg.	Med.	Surg.	Med.	Surg.
6	3	5	4	4	42	31	697	.77	18
30	25	16	22	15	422	197	5094	5	127
12	12	13	18	33	160	382	2918	10	73
6	8	7	15	17	120	274	2251	7	56
1	-	1	-	34	8	539	226	14	60
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	4	-	1	29	1	315	3	8	.07
-	-	-	-	-	-	-	-	-	-
5	10	4	10	-	129	-	1091	-	27
-	1	-	-	-	15	-	234	-	6
32	24	14	25	9	240	97	3703	3	93
1	2	-	1	-	22	-	427	-	11
2	1	1	1	6	20	123	392	3	10
4	3	2	4	23	41	474	678	12	17
3	9	3	5	20	41	411	782	10	20
-	-	-	-	-	1	-	32	-	.8
3	2	3	-	4	19	30	307	.75	8
-	-	-	-	-	-	-	-	-	-
3	2	4	4	12	38	262	1046	7	26

TABLE II

TABLE II

INCIDENCE AND DISTRIBUTION OF

Conditions	Admissions per month								1945-1946
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total									
Medical patients	67	63	63	79	88	57	62	52	65
Surgical patients	136	133	122	113	135	127	157	140	134
*Asthma	13	2	8	1	-	1	-	-	-
**Acute Rhinitis	6	4	10	3	15	6	-	-	-
Laryngitis	-	-	-	1	-	1	-	-	-
Pharyngitis	1	1	3	-	2	2	1	2	-
Bronchiectasis	2	1	-	-	1	1	1	-	1
*Bronchitis	6	3	4	14	6	6	5	5	1
*Empyema	2	-	-	-	1	-	1	-	-
**Influenza	2	-	5	3	5	1	1	-	-
*Pleurisy	6	1	-	-	2	1	4	4	3
**Pneumonia	19	17	19	16	16	12	12	10	10
**Pulmonary Tuberculosis	2	4	4	-	1	-	-	2	-
*Hay fever	-	-	-	-	-	-	-	1	-
*Sinusitis	1	2	4	-	1	-	-	2	3
*Tonsillitis	4	14	25	1	1	1	1	2	1

CONDITIONS OF THE RESPIRATORY SYSTEM

June	July	Aug.	Sept.	Total number of patients		Total number of patient days		Patient Days per student	
50	50	59	65						
149	150	109	149	Med.	Surg.	Med.	Surg.	Med.	Surg.
4	3	2	3	57	1	620	1	16	.02
1	1	4	1	44	3	491	18	12	.45
-	-	-	-	2	-	10	-	.2	-
1	-	-	-	13	-	74	-	2	-
-	-	1	3	10	1	85	14	2	.35
3	1	1	-	45	10	432	145	11	4
-	-	1	-	2	3	34	120	.85	3
-	-	-	-	17	-	166	-	4	-
-	2	2	-	24	1	580	33	15	.8
7	2	6	6	139	13	2213	317	55	8
-	-	2	-	14	1	346	9	9	.2
-	-	-	-	1	-	17	-	.3	-
-	2	1	-	13	4	154	18	4	.45
-	-	-	-	14	36	142	51	4	1

TABLE III

TABLE III

INCIDENCE AND DISTRIBUTION OF

Conditions	Admissions per month							1945-1946	
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May
Total									
Medical patients	67	63	63	79	88	57	62	52	65
Surgical patients	136	133	122	113	135	127	157	140	134
**Arterioselerosis	14	13	15	10	7	2	2	2	5
**Heart Diseases	30	16	24	13	6	5	6	6	8
Arterioselerotic	18	13	11	10	-	1	1	1	1
Bacterial	-	-	-	-	-	-	-	-	-
Congenital	-	-	-	-	-	-	-	-	-
Hypertensive	12	15	6	1	3	-	2	1	2
Rheumatic	-	2	4	-	-	2	1	-	3
Syphilitic	-	3	1	-	-	-	-	-	1
**Phlebitis	16	7	16	11	4	2	2	1	4
**Varicosties	67	26	29	22	23	17	20	35	21
*Anemia	10	8	1	4	2	3	5	3	3
*Coronary Thrombosis	9	7	17	7	5	1	3	3	3

THE CIRCULATORY SYSTEM

June	July	Aug.	Sept.	Total number of patients		Total number of patient days		Patient Days per student	
50	50	59	64						
149	150	109	149	Med.	Surg.	Med.	Surg.	Med.	Surg.
4	1	1	4	71	10	1813	191	46	5
4	5	6	4	105	22	2777	243	70	6
-	-	-	2	49	9	1073	149	27	4
-	-	-	1	3	-	73	-	2	-
-	-	-	-	-	-	-	-	-	-
1	-	1	-	44	-	1166	-	29	-
1	1	-	-	14	-	266	-	7	-
-	-	-	-	2	-	22	-	.5	-
6	6	13	11	28	60	666	1062	17	27
19	25	14	28	16	329	326	3598	8	90
5	4	1	1	41	9	615	167	15	4
6	-	1	3	54	8	1386	188	35	5

TABLE IV

TABLE IV

INCIDENCE AND DISTRIBUTION OF

Conditions	Admissions per month								1945-1946
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total									
Medical patients	67	63	63	79	88	57	62	52	65
Surgical patients	136	155	122	113	135	127	157	140	134
**Diabetes mellitus	7	18	13	18	11	8	5	5	2
*Hyperthyroidism	4	2	2	2	5	3	1	2	7

CONDITIONS OF THE ENDOCRINE SYSTEM

June	July	Aug.	Sept.	Total number of patients		Total number of patient days		Patient Days per student	
50	50	59	65						
149	150	109	149	Med.	Surg.	Med.	Surg.	Med.	Surg.
9	8	2	6	90	21	1188	720	30	18
1	3	3	1	8	24	73	295	2	8

McCarthy, Sister Maurastelle

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