AN ABSTRACT OF THE THESIS OF

EVA ANN DAVIS for the Master of Arts Degree in General Studies.

Date thesis is presented May 4, 1954

Title: THE IMPORTANCE OF COMMUNITY NURSING IN A DEGREE PROGRAM OF STUDY

Abstract approved (Major Professor)

This study is concerned with the contribution of a supervised field experience in public health nursing to the enrichment of a basic collegiate program of study in nursing.

Justified on the basis of the current trend in collegiate nursing education to include additional planned experience in nursing agencies outside of the hospital, the study attempts to demonstrate the importance and value of such a development.

The experiment is conducted in an Oregon school of nursing which has accreditation for a collegiate basic professional program. Current curricular study by the faculty is concerned with what changes would be necessary in the program to provide the essential theory and practice which would prepare graduates to hold first level positions in public health nursing.

This contribution to the curricular study takes one group of students and tests their knowledge of principles of public health nursing with a test which has been prepared for that purpose by the American Public Health Association. The scores and rating of these students are compared to national scores and to the scores of a group of students in another university school of nursing who have had an experience in public health nursing in addition to the usual hospital experiences.

The findings on the test reveal that the students who have had public health nursing also have a consistently high rating in the test. The students who have not had experience in public health nursing do not rate as high as the first group yet have an average rate which is within the national curve of scores. This is interpreted to mean that the integrated curriculum now used in the school program is making a worthy contribution to the students' knowledge of principles of public health nursing.
However, an examination of a profile of performance in twelve subject matter areas of the test indicates inconsistencies within the total scores and wide swings of above and below average ratings. This is interpreted to mean that the students have not had the opportunities necessary to develop a consistently high level of knowledge of community nursing.

A curricular evaluation of four areas in which the students had the lowest scores points to places and ways in which the curriculum can be strengthened.

The study concludes with a recommendation that a supervised field experience in public health nursing would be an important and valuable addition to the curriculum of the Department of Nursing Education at the University of Oregon Medical School. It would strengthen an already basically sound nursing program and would indicate the acceptance of an urgent responsibility for preparing public health nursing personnel.
THE IMPORTANCE OF EXPERIENCE IN COMMUNITY NURSING IN A DEGREE PROGRAM OF STUDY

by

EVA ANN DAVIS

A THESIS submitted to

OREGON STATE COLLEGE

in partial fulfillment of the requirements for the degree of

MASTER OF ARTS IN GENERAL STUDIES

June 1954
Approved

Professor of Education

Associate Professor; Assistant Director in Charge of the Teaching Programs of Nursing Education

Associate Professor, Assistant Director in Charge of Public Health Nursing Program

Chairman of General Studies Committee

Dean of Graduate School

Date Thesis is presented May 4, 1954

Typed by Mrs. Debbie Christoffersen
ACKNOWLEDGMENTS

The writer wishes to express sincere appreciation for the untiring efforts and support given her in this study by Miss Lucile Gregerson, Associate Professor and Miss Eleanor E. Palmquist, Associate Professor, Assistant Directors in the Department of Nursing Education, University of Oregon Medical School. Appreciation for their interest and assistance is extended to Dr. James C. Caughlin as Major Professor, to Henry P. Hansen, Dean of the Graduate School and to Dr. E. A. Yunker, Chairman of General Studies Committee.

Thanks are due to Miss Henrietta Doltz, Director of the University of Oregon Medical School, Department of Nursing Education and to Miss Katherine J. Densford, Director of the University of Minnesota School of Nursing for permission to use information relative to students in the two schools.

Grateful recognition is given to Miss Winifred Wolfe, Assistant Director in charge of Basic Professional Programs at the University of Oregon Medical School, Department of Nursing Education for assistance with the testing program.

The writer is indebted to Miss Alma Sparrow, Instructor, University of Minnesota School of Nursing for collaboration on the original study for this thesis; and to Ruth V. Johnston, Ph.D., Assistant Professor, University of Minnesota School of Nursing and Carl E. Hopkins, Ph.D., Associate Professor, Department of Public Health and Preventive Medicine, University of Oregon Medical School, for technical advice and assistance.
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th></th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACKNOWLEDGMENTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LIST OF TABLES AND FIGURES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Chapter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I. INTRODUCTION</strong></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Changes in Nursing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Scope of the Problem</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Procedure</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Justification for the Study</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>II. REVIEW OF LITERATURE</strong></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Nursing Education</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Public Health Nursing</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td><strong>III. PROCEDURE</strong></td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Method of Study</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Achievement in Schools of Nursing</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>American Public Health Association</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Student Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IV. THE SCHOOLS OF NURSING AND THE STUDENT GROUPS</strong></td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>University of Oregon School of Nursing</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>The Curriculum</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Public Health Nursing</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Group 0</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>University of Minnesota School of Nursing</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>The Curriculum</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Public Health Nursing</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>Group M</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td><strong>V. ANALYSIS AND INTERPRETATION</strong></td>
<td></td>
<td>62</td>
</tr>
<tr>
<td>The Schools of Nursing</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Achievement in the Schools of Nursing</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Comparison of Student Rating on Test</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>TABLE OF CONTENTS - Continued</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI. CONCLUSIONS AND RECOMMENDATIONS</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>APPENDIX I</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>APPENDIX II</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>APPENDIX III</td>
<td>89</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF FIGURES AND TABLES

Figure 1. Profile chart used by the Professional Examination Service of the American Public Health Association in reporting student's scores .................................. 35

Figure 2. Schematic diagram of the logical structure of the experiment ........... 39

Figure 3. Percentage distribution of individual grade point averages in Group O and Group M ...................................................... 67

Figure 4. Frequency distribution of individual APHA test scores in Group O and Group M and percentage distribution of national test scores ............... 68

Figure 5. Group profiles showing below average, average and above average rating by subject matter areas for Group O and Group M ............................................. 70

Table 1. Cumulative grade point averages for Group O and Group M ............... 87

Table 2. APHA Student Public Health Nursing Test Scores ......................... 88

Table 3. APHA Student Public Health Nursing Test Scores by subject matter areas.. 89
THE IMPORTANCE OF EXPERIENCE IN COMMUNITY NURSING IN A DEGREE PROGRAM OF STUDY

CHAPTER ONE

INTRODUCTION

During the first half of the twentieth century outstanding developments have taken place in professional nursing. Discoveries and developments in the field of science have laid the foundation for developments in medicine and in public health. Increased interest in matters of health and social welfare have opened new and wider ranges of duty to the nurse. Nursing is no longer limited primarily to activities within the hospital or to curative nursing. Nursing has become a community service in which preventive and educational activities are an important part. The modern concept of nursing considers the hospital only one of many agencies in a community.

As the concept of the hospital's function in the community has expanded and the demands for better medical care and health supervision have increased, the need for better nursing services has become more evident. An important trend is the recognition of the need to individualize patient care through understanding physical, emotional, mental, social and spiritual factors affecting each patient. An equally important trend in nursing is the incipient
realization of the need for considering each student nurse as an individual human being with unique potentialities. (21, p.3)

A survey of the literature on nursing education shows that many changes have taken place in the relatively brief period since the establishment of the first training schools for nurses in this country in 1873. Some have been a result of the changing social situation, some a result of the changed position of women in modern society and some have accompanied the advances in the medical and public health fields.

The interest in matters pertaining to health held by modern communities has greatly influenced the professional nurse both in her education and in her work. The content of nursing no longer evolves from a mastery of nursing skills, routines and techniques. Manual dexterity is still fundamental, but skill and judgment must be based on a foundation of cultural, scientific, and sociological knowledge.

The modern concept of nursing is broad. It includes care of the sick, both mind and body. It considers the sick person both as an individual and as a member of a family and community. It concerns itself with helping people keep well. It cooperates in bringing health and the health resources of the community within the reach of all people.
The nurse of today, to assume this responsibility, must be scientifically informed and technically competent. She must have the necessary psychological and sociological insights. She must be community-minded. More important, she must understand human behavior in individuals of all ages, from infancy to old age, in both the presence or absence of illness. (21, p.5)

In the changing society of today, it is a challenge to nursing education to prepare the kinds and number of nurses who can continue to give competent nursing care in this dynamic situation. Therefore, it is of particular interest in this study to examine some of the more recent additions and changes in the nursing curriculum, particularly of sociological implication.

CHANGES IN NURSING. The changes that are evident in nursing and nursing education have taken place gradually. As newer concepts have developed, curricular adjustments have been made to include them in the study of nursing.

The very early courses were based primarily on nursing of medical and surgical patients. Care of mothers and infants was carried on in separate hospitals or in the home until near the turn of the century when the more popular use of hospitals for childbirth brought obstetrics into the nursing curriculum. Next, as the care of children became increasingly important, pediatric
nursing became first an elective, and then a requirement in schools of nursing. The fifth clinical area to be so developed was psychiatric nursing which only recently has become a required study for all nursing students.

For example, the early curricular requirements for schools of nursing in Oregon, set up by the Oregon State Board for the Examination and Registration of Graduate Nurses, required three clinical areas for study - medical nursing, surgical nursing and obstetrical nursing. In 1938, pediatric nursing became a requirement; and by January 1, 1950, all students graduating from any school of nursing in Oregon were required to have had psychiatric nursing.

The most recent trend has been an indication of the need for a new emphasis on the inclusion of the social factors of nursing as a most effective means of improving the quality of nursing.

A weakness heretofore recognized, but today accentuated by the need for a healthful nation is the problem of bringing into the curriculum public health, or the social and health content of nursing. --- the assumption being that the social and health factors in nursing pervade the entire curriculum and cannot be confined to any one course; that health teaching cannot be restricted to any one branch of nursing but is the obligation of those who care for anyone sick or well. (34, p.288)

For many years, nursing educators have considered public health nursing a specialty which required
preparation beyond the basic nursing curriculum. While the scope and responsibilities of public health nursing have increased as nursing has kept step with social changes and other scientific advances, the traditional pattern of preparation of personnel has been unable to keep pace with the increasing demands.

Inadequacies in preparing nurses for public health nursing responsibilities are as critical as the numerical shortage of workers in the field, if not more so. (11, p.624)

Universities and colleges have been accepting increasing responsibilities for the education or nurses as nursing has approached professional status. In an increasing number of degree schools of nursing a broad curriculum has been designed to prepare the students for beginning positions in public health nursing agencies in addition to their previous preparation.

Of the 1,148 schools offering professional nursing education in the United States, 219 or 19% offer either an Associate in Arts or a Baccalaureate degree. (2, p.50) By April of 1954, eighteen of these schools had made the necessary changes and adjustments in their program of study to meet criteria for accreditation established by the National Nursing
Accrediting Service. This accreditation indicates that they can prepare their graduates to do public health nursing under supervision. This is referred to as first level positions in public health nursing. (35, p.34)

THE PROBLEM. It is therefore of timely concern to each degree school of nursing to consider seriously the implications of this newest trend in nursing education.

The acceptable traditional pattern of professional nursing education which has developed in universities can be planned, according to many advocates, to provide students with all the skills and understandings essential for competent nursing. This type of curriculum uses the hospital as the major community facility for student experience. The curriculum is planned in five clinical areas - medical, surgical, obstetrics, pediatrics and psychiatry. In all of these areas, the social and health aspects of illness and health have been carefully integrated.

1 All accrediting activities in nursing were merged into one service under the authorization of the Joint Board of Directors of the Six National Nursing Organizations in January 1949. The principal function of this agency is to provide a means for accrediting professional and non-professional educational programs in nursing. Accreditation under the NNAS is a voluntary process by each educational institution.
Other authorities hold the premise that experience in community agencies outside of the hospital in addition to the well coordinated program is essential if a professional nurse is to be prepared to do quality nursing in our modern society. (25) (18). Such supervised field experience is also referred to as community nursing or public health nursing.

It may appear paradoxical to accept the philosophy of integrating certain concepts into the entire curriculum and at the same time to advocate developing a program which provides for a segmented assignment to an outside agency for experience. It would be of value to learn what differences exist in students who have had their nursing experiences under one or the other kind of program. The importance of an experience in community nursing could be determined in part if it were possible to evaluate its influence on nursing in all areas in addition to meeting requirements for employment in public health agencies.

This study proposes to utilize a particular test which has been prepared by the American Public Health Association to measure knowledge of principles of public health nursing attained by students on completion of a degree program of study which has included a supervised field experience in public health nursing.
This test has been administered to a group of students in a school of nursing which is accredited as a collegiate basic professional program by the National Nursing Accrediting Service. This school is interested in attaining further accreditation by meeting the criteria necessary for preparation of nurses to do first level public health nursing.

The findings on the tests are to be used to:

1. Determine if a significant difference is found between the scores of the selected students and national scores on the test;

2. Determine if a significant difference is found between the original group of students and another group in one of the eighteen schools of nursing which has provided an experience in public health nursing.

The items in the test selected are arranged into twelve subject matter areas of nursing. If a significant difference is found between the student groups on the entire test further analysis will attempt to determine which particular subject matter areas contribute most heavily to the difference.

Curricular evaluation based on this analysis will attempt to draw certain limited conclusions regarding the strengths and weaknesses in the nursing program.

SUMMARY. Because of the timeliness and need for
consideration of curricular changes in degree schools of nursing this study undertakes to investigate the importance of a supervised field experience in community nursing as an integral part of the basic nursing curriculum. It is anticipated that the outcomes of the study will provide guide lines for proposed curricular changes in one nursing school.
CHAPTER TWO

REVIEW OF LITERATURE

Today's demands upon the nursing profession have many implications for nursing education. Changes in the familiar curriculum pattern are called for, - changes in methods of teaching, revision of content and adjustments in the philosophy of evaluation. Likewise, there is a need to develop a comprehensive type of nursing care, - that is concerned with all aspects of the patient's illness and recovery.

There are various approaches to this newer type of care. Of particular interest in this study is the increased interest within the last fifteen to twenty-five years in the place of social and health aspects of nursing in sickness and health, and its placement in the basic nursing curriculum.

This is not a new concept in nursing but one which has been receiving newer or renewed interest.

Florence Nightingale, the great founder of all modern nursing, referred to the patient and his home situation and to the relationship of sickness and health in her well known Notes on Nursing.

The very elements of what constitutes good nursing are as little understood for the well as for the sick. The same laws of health or of nursing, for they are in reality the same, obtain among the well as among the sick. (38, p.6)
Since that time, this concept of nursing as concerned with health as well as with sickness has been closely attached to or potential, although not always clearly developed, in the very word nursing.

Someplace in the late 19th century when training schools for nurses entered into an era of over development and the exploitation of student nurses entered into the picture, this particular concept was lost sight of for some time.

---the report of a special committee appointed by the Rockefeller Foundation in 1918 made it clear that there was one fundamental condition which was handicapping progress, a condition which must be removed if satisfactory results were to be achieved. The basic weakness lay in the fact that nursing schools were operated for the most part as adjuncts to the management of hospitals and not primarily as educational institutions. However constructive might be the leadership of the better hospitals, this has proved a grave defect in the scheme. It has led to great overproduction of nurses inadequately selected and imperfectly educated; and in spite of the most gallant efforts of nurse educators and the great impetus given to the development of a few high-grade university schools of nursing by the Rockefeller Committee report, the general situation has remained a seriously unsatisfactory one. (9, p.12)

The establishment of a Committee on the Grading of Nursing Schools in 1926 with the express purpose to "study the ways and means for 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" (9, p.16) resulted in many positive changes in nursing.
During the study undertaken and following the report of the committee (9) several articles were published which point to the changing concepts of the scope of nursing.

Isabel Stewart, one of the early leaders in nursing education in this country, described what in her opinion differentiated nursing as a profession from a vocation or trade.

The real essence of nursing, as of any fine art, lies not in mechanical details of execution, nor yet in the dexterity of the performance, but in the creative imagination, the sensitive spirit and the intelligent understanding lying back of these technics and skills. Without these, nursing may become a highly skilled trade but it cannot be a profession or a fine art. (45, p.7)

In 1932, Miss Eldridge and Miss Burgess, both members of the Grading Committee, described what in their opinion constituted good nursing. Miss Eldridge introduced the term "quality" nursing and defined what she meant.

Quality nursing is the cooperative care of the patient with the physician, the family, etc. which produces results as follows: (1) It increases the physical and mental comfort during illness. (2) It assists the patient to an improved state of health. (3) It assists the patient to avoid recurrences of the same condition. (4) It raises the norm of health (both physical and mental)--- (17, p.1195)

May Ayres Burgess listed the qualities of a good nurse as follows: skill, keen observation, ability to apply general knowledge and theory to concrete situations,
ability to judge and to organize, and sympathy and understanding. She said it is the ability to make judgments concerning her work which differentiates in a large measure the good nurse from the poor one. (5, p.1238)

Amelia Grant, in a discussion of the place of public health in the nursing curriculum, stated that the addition of public health to the basic curriculum was a development not a change,

---a change in nursing which has about it the process of development and in accordance with the evolution of modern medicine. No longer can a nurse concern herself solely with her patient's physical needs and physical symptoms to give adequate nursing care. (20, p.173)

Dr. Sundwall, in an address before the Indiana State Nurses Association, in October 1933, on the subject "Good Health as a Factor in Quality Nursing", defined what in his opinion constituted quality nursing.

I regard a quality nurse as one who not only functions adequately in the sick room but who is fully alive to the many needs of humanity relative to better and more effective living and who is willing to go out and work for bringing a sound mental, emotional and physical citizenry. (46, p.127)

These statements have several things in common. Quality nursing rests upon sound scientific principles, includes the physical, emotional and social components of nursing care, assists the patient to a better state of health and stresses prevention as well as curative concepts.
In 1937, the National League of Nursing Education published the third Curriculum Guide for Schools of Nursing. Here we find, in the definition of nursing, that health is an implicit part of nursing.

Much confusion and many differences of opinion exist about the meaning and scope of nursing. It can be defined narrowly to mean little more than the manual activity required in the routine physical care of the sick. The word nursing can also be interpreted broadly to mean health conservation in its widest sense, including the care of normal children and adults, the nursing or nurture of the mind as well as the body; health education as well as administration to the sick; the care of the patient’s environment, social as well as physical; the health services to families and communities as well as to individuals. (32,p.20)

Prior to the publication of the Guide in 1937, schools of nursing which were concerned with introducing any aspects of community nursing attempted to do so through an isolated assignment in which the students were sent for a period of time into some nursing agency, oftentimes for service with little supervision.

Following the publication of the new Guide, the emphasis shifted to the importance of the integration of the social and health aspects of nursing throughout the entire basic nursing curriculum in order to develop a broader appreciation in students’ minds toward the importance and place of this concept. With this preparation
as a background, the Guide recommended that the student then be sent out, if possible, into a community nursing agency.

For a period prior to the war years an increasing number of schools of nursing came to utilize and appreciate the value to their students of two months of experience in which a community agency was expected to do sort of a finishing off job to the product of their school. (19, p. 85) So great were the demands, in many places the agencies were forced to offer a two week period of observation in place of the two months block of experience.

This limited field opportunity plus the reduced personnel in agencies and schools of nursing and the demands of the war forced schools of nursing to reevaluate the whole situation. The result has been an increasing acceptance and implementation of the so-called integrated curriculum.

An organized effort can easily be traced through the wealth of material published by individuals and groups of a concerted attempt to promote a broader concept of nursing.

In 1940, special impetus was given by the Committee on Curriculum of the National League of Nursing Education to the formation of joint state committees of state leagues of nursing education and state organizations for
public health nursing. In 1943, an outline was prepared and published based on the materials submitted by the state committees. (24)

In 1944, the formulated objectives compiled by the Joint Committee of the two national nursing organizations on the integration of the social and health aspects of nursing in the basic curriculum were published. (16)

Further assistance to schools of nursing was made available through the contributions of leading nursing educators such as Dunn (16), Frost (19), and Carnes (7); and the Bixlers (3), Tyler (47), and Sanger (44) and many others in the field of general education.

Examination of changing patterns of nursing curricula indicate a growing realization of the importance of the social elements as a vital part of nursing.

To recapitulate, the trends in the attempts to include the social aspects of nursing in the basic nursing curriculum have been: First, an isolated type of affiliation; second, guided observation; and third, integration. In more recent planning, the order has been reversed to first, integration; second, affiliation for observation; and third, affiliation for supervised field experience. (19, p.85)

In using these terms, "observation" has been defined
as a planned visit to a health agency to observe the program, without active participation therein. The objective is to see the functioning of an efficient community program. The duration of the visit is brief. Observation may be of value to the uninitiated as well as the highly skilled. (41, p.40) "Affiliation" is used in its literal meaning "an association, a friendly intimate relation, a connection". (19, p.35) "Supervised field experience" is a planned period of instruction, observation and active participation in a comprehensive organized public health program as an integral part of or a sequel to formal academic training in public health. The objective is to learn to apply the basic principles and skills studied in a university course to actual field situations. The duration of a planned field experience is usually from two to four months. (41, p.40) "Integration" has been described by Jensen as a method of relating varieties of subject matter to units of study or to problem solving situations. (22, p.55)

Dr. Johansen in a paper read at a meeting of the Education Section of the Oregon State Nurses Association in 1949, corroborated what Dr. Brown has said about "the nurse of the future". (4) The nurse like the doctor is engaged in a profession where she must be equally at home in theory and practice. Constant interplay between
the two can best be shown in learning situations which utilize subject matter study and practical experience equally. Integration in its widest meaning refers to the wholeness of the individual. The nurse is an individual who for her own sake and for the sake of her patients should be a whole and integrated personality.

(23, p.118)

The nurse should know something about the institutions found in the society in which she lives and about the constant interactions between these institutions and individuals. The ideal nurse then becomes:

that person who, in professional and general education, has an integrated approach to herself, her work, and her society; that person who is used to dealing with problems and recognizes them as such, whether in the patient, herself, or in a cultural situation; and that person who sees the relationships of interaction, through every phase of our existence, and who sees the necessity of revaluing the old conclusions in the light of new evidence.

(23, p.119)

Affiliation for experience is no longer considered an entity but a part of the whole program of integration. The integration idea has been spoken of as one of the newer patterns of education. Actually it is giving "old themes new forms and new meanings". (43, p.571)

It may be said that integration is a pattern in which education seeks to link theory and reality. It is in a sense a philosophy of education with its own methods of attainment.
As a direct result of this adjusted thinking another curricular development has grown out of the need for more nurses prepared to give a comprehensive kind of nursing care in the hospital or the home. This is the inclusion of a field experience in public health nursing in collegiate nursing programs which has a different objective than the old type of affiliation.

This additional experience has two main objectives. One is to strengthen the opportunities for the student to observe the relationship of environmental factors on illness, and develop her appreciations of the universality of social factors in illness. Such knowledge would strengthen the quality of nursing care wherever she functions and would augment all of her other learnings. The second objective has been to prepare the student to do staff level nursing under supervision in a public health nursing agency upon graduation.

Under the auspices of the National Organization for Public Health Nursing, formed in 1912, educational programs for graduate nurses who desired to go into public health nursing have been fostered and encouraged. There have been forty-four university programs of study qualified to prepare nurses in this field in the period between 1912 and 1945. (35, p.34) Not all of these programs survived. Continuance of the program depended upon qualified faculty, sufficient students and financial
support. Today, there are thirty-seven such programs in the United States. (36)

These programs of study are generally a minimum of one year in length. Even though sincere efforts have gone into this type of education it has not produced the numbers of nurses necessary in this field and only one-third of the nurses employed in public health nursing services have completed a year or more of recommended preparation. These programs have also been costly and time consuming and consequently do not encourage enough qualified nurses to enter public health nursing.

For many years nursing educators have believed that a graduate nurse desiring to study public health nursing must first have become a "good nurse". This term seemed to apply generally to a graduate who had developed technical skills in caring for those who were ill, and who had a well established satisfactory work record.

Certain changes in thinking today suggest that a good nurse should have additional components in her background, such as a philosophy of positive health, certain skills in preventive and promotional procedures and an ability to handle interpersonal and intergroup relationships. (10, p.vii)

The Education Committee of the National Organization for Public Health Nursing, continuing to give leadership in the education of public health nursing personnel,
recommended that additional programs for the preparation of graduate nurses for beginning public health positions should not be developed, and has suggested that instead such preparation can be provided in a well-planned basic professional program. (35, p.35)

Attention has turned, therefore, to the university basic degree programs which have been developing in heartening numbers during the last few years. Although many of them need much strengthening, their graduates in general are showing the value of good basic preparation in the biological and social sciences and in the various nursing specialties, through their understanding of behavior, their grasp of teaching content, and their ability to give comprehensive nursing care. ---It is interesting to note that because so much of the content is integrated throughout the curriculum, the university basic program is able to prepare the student to function after graduation as a staff public health nurse in a shorter total period of time than is required by the other method. Moreover, the inclusion of public health nursing in the basic degree program in turn broadens the student's concept of total nursing. (18, p.4)

Continuing to foster this plan for the preparation of public health nurses at staff level the Executive Committee of the Education Committee of the National Organization for Public Health Nursing set up "Criteria for Collegiate Basic Professional Programs Designed to Prepare Their Graduates for First Level Positions in Public Health Nursing Under Supervision". These criteria have been incorporated into the manual of the National Nursing Accrediting Service and can be summarized under thirteen criteria or characteristics which indicate
institutional excellence of an educational program in nursing.

_Accreditation or Approval by other Groups._ Acceptance by the appropriate approving associations will indicate that the institution has already met criteria of primary concern.

_Philosophy and Purposes._ A formulated and stated philosophy of nurse education which gives appropriate consideration to the characteristics of its students and the society which its graduates will serve, and a written statement of purposes for the nurse education offered must be clearly stated.

_Administration._ Each institution should have a plan of organization and administration which will be effective in its own situation and will provide for cooperation with all other units and departments for the fulfillment of its general purpose.

_Finance._ Financial support and administration should provide for stability of income and effective utilization of funds to achieve the purposes of its program.

_Faculty._ Competence of the educational personnel and the conditions under which they work will promote optimum efficiency and are indispensable elements of a sound educational unit.
Student Personnel Service. Student personnel service should include provisions for selection, orientation, counseling programs, student organization, health services, residence and financial aid.

Curriculum. There is no established pattern for a nursing curriculum; however, the organization of a curriculum should be carefully planned and provide for unity, balance, logical and psychological progression, and should be influenced by its philosophy and purposes.

Clinical Resources. Clinical resources should supply the learning experiences implied in the purposes of the program, should be found in in-service and outpatient services in hospitals and in other community agencies, should give experience in medical, surgical, obstetric, pediatric, psychiatric, communicable disease, public health nursing, and should be evaluated in terms of the adequacy of the clinical and physical facilities, equipment, and personnel to permit instruction in good nursing care.

Instruction. Instruction procedures will be evaluated on the basis of the concern of administrative officers for effective instruction; the degree of interest in student scholarship; the solicitude of the faculty for the adjustment of the instructional procedures to the abilities, interests, and needs of the students; the concern manifested in the improvement of marking, promotion,
and graduation practices; and the alertness of the faculty.

**Library.** Library holdings and organization for use in relation to the purposes of the educational program and its effectiveness as reflected by the manner and the extent to which such facilities are used by students and faculty will be evaluated.

**Physical Facilities.** The physical plant will be evaluated in accordance with accepted standards, effective operation and maintenance so that health is preserved and the demands of the educational program are met.

**Records, Reports and Bulletins.** The completeness of the record system, the care in preparation and filing and the accessibility for counseling purposes will be examined. The bulletin will be judged on authority, accuracy, organization, and presentation of policies and programs.

**Educational Program Study.** An important characteristic of an educational unit is its concern for improvement of its program through self-study. The educational unit should undertake to secure the facts it needs in a methodical manner using whatever techniques are suitable for its purpose. (37, pp.7-47)

In addition to the criteria established for basic collegiate programs, certain specific requirements or
characteristics are looked for in a nursing school which prepared nurses for first level positions in public health nursing. These include:

Faculty personnel which includes at least one nurse who is well prepared and qualified in public health nursing; nursing faculty members who have had some orientation to the public health field; and faculty members from allied disciplines who can contribute to the students' learning experiences.

A curriculum enriched in content relating to community nursing. It is suggested that this follow the outline in the Public Health Curriculum Guide. (25)

A supervised field experience of a minimum of 320 hours in a qualified community agency which is able to provide instruction and supervision academically acceptable to the university. (30)

These criteria have been used by the Public Health Nursing Board of Review of the National Nursing Accrediting Service in the process of accrediting eighteen programs in the United States. (11, p.625)

In planning to meet these broad demands of nursing the faculties of schools of nursing have found it possible, by concerted effort, to provide for the integration of the emotional, psychological and sociological aspects into the students' learning experiences of the various clinical areas. It is quite feasible to present theory in public
health nursing. The difficulty which has presented itself has been to provide adequate field work experience in public health nursing agencies for all of the students.

The number of students which can be accommodated in any public health agency is often limited. This has meant that several agencies must be utilized and developed. Even this has not always provided enough experience for all of the students. The problem seems to be self perpetuating. Until there are more qualified public health nurses, agencies will be unable to expand their programs and assume responsibility for providing instruction and supervision for student nurses. Until students can have an opportunity to see public health nursing at first hand, this field of nursing cannot compete equally with others for the students' interest as a field for graduate practice.

As the trend toward preparation of the staff public health nurse in the basic nursing program grows, other programs are being developed for the graduate of a three year hospital school of nursing to gain a baccalaureate degree in general nursing; and for a public health nurse with two years of experience to gain a masters degree in teaching, supervision or administration.

Evaluation of the performance of the product of this changing curriculum has become increasingly important.
What new or different functions could be expected from a nurse prepared in this broader concept?

In summarizing what goals could be anticipated from the inclusion of such content in the nursing program, the Education Committee of the Michigan Nursing Center Association has presented an interesting list:

1. Enlarged understanding and appreciation of people as individuals and as members of families in the community.

2. Increased ability to identify patient needs and to meet as many of the nursing needs as possible within the framework of the hospital and the community.

3. Increased knowledge of the factors which contribute to health and which prevent disease; ability to apply this knowledge to the student's pattern of living and to help the patient to understand and utilize such knowledge in regaining and maintaining his health.

4. Increased ability to carry on purposeful conversation with patients.

5. Ability to plan for continuity of nursing care with the patient and his family, and with other professional people who can contribute to such care.

6. Familiarity with and increased ability to use sources of information about available resources in the community which might meet specific patient needs. (29, p.18)

Another interesting summary of the expected functions of the nurse in the modern community is found in the Canadian Curriculum Guide:

1. To be able to observe, to recognize and to interpret intelligently the
physical, mental and emotional manifestations of health and illness.

2. To be able to give expert bedside nursing care in all types of illness.

3. To be able to adjust to home situations and to maintain as far as possible a healthful environment for the patient.

4. To be able to apply the principles of mental hygiene in the care of the sick, and to develop in the patient the mental attitude which will favor recovery.

5. To be able to give instructions in the principles and practices of health as applied to the restoration, conservation, and promotion of physical and mental health.

6. To be able to cooperate with doctors and other professional workers, to maintain good relationships, and to participate in a community program for the sick, the prevention of disease, and the promotion of health.

7. To be able to cooperate with hospitals, public health departments, public health nursing organizations, and social agencies in the use of their facilities and to assist in maintaining their standards of service for the welfare of the patient, the family, and the community.

8. To be able at all times to invite confidence, to manifest a real interest in human problems, and to render the kind of assistance which typifies the spirit and practice of an indispensable professional service. (6, pp.9-10)

In conclusion, a review of nursing literature for the past twenty years, concerned with the social elements of health and disease, reveals that the trends have been
successively, - affiliation for service; affiliation for observation; integration of the factors into the whole curriculum, accompanied by brief observations in the form of selected field trips; and mostly recently, affiliation as an integral part of the whole program. The current trend is capitalizing on the positive outcomes of each of the preceding arrangements by developing the type of curriculum that attempts to integrate the social and health aspects into every clinical experience, providing the student with the knowledges, understandings, skills and concepts essential for comprehensive nursing care in the community as well as in the hospital. In implementing the present curriculum the facilities of various types of community agencies are being used more extensively.

RESEARCH LITERATURE. A review of research literature reveals that very little has been reported on studies which have been concerned with evaluation of the achievement of student nurses who have had a public health experience in the basic nursing program.

In 1951, Eugenia S. Martinson completed a study at the Boston University of the first class of seven students to be graduated from the basic collegiate program accredited for public health nursing. This study was concerned with measuring the performance of nursing following experience in a public health nursing agency.
The American Public Health Association Public Health Nursing Student Test was utilized as one of the tools for measurement of performance. (27)
CHAPTER THREE

PROCEDURE

The purpose of this study is to determine whether a supervised field experience in community nursing has appreciable influence on the concepts of the social and health aspects of nursing gained by students in a basic collegiate nursing program. It is also concerned with how extensive an appreciation has been gained by students through an integrated program which does not provide a segregated assignment in public health nursing.

An intensive investigation of the literature for the last twenty years concerned with the social elements of nursing and how it has been included in nursing education has been carried out.

The nursing school which is being studied is the University of Oregon Medical School Department of Nursing which is referred to as the University of Oregon School of Nursing.

The nursing school which has been selected from the eighteen schools which have made basic changes in their curricula is the University of Minnesota School of Nursing. This selection was made because the two schools are similar in many respects and because the programs in these two schools were more familiar to the writer.

Permission has been granted by the Directors of the two schools to use the information about the students
selected for the study.

An extensive study of the programs of nursing education in the two schools has been carried out in order to draw conclusions regarding their similarities or differences.

A group of students in each school was selected from those who were completing their studies in the school year 1952-53. The group from the University of Oregon School of Nursing will be referred to as GROUP O; the group in the University of Minnesota School of Nursing as GROUP M.

The test which has been used is the only tool available at this time prepared to evaluate students in relation to their knowledge of principles of public health nursing.

AMERICAN PUBLIC HEALTH ASSOCIATION STUDENT PUBLIC HEALTH NURSING TEST. Each student included in the study has completed the particular test prepared by the Merit System Service of the American Public Health Association to measure students' knowledge of public health nursing principles upon completion of a program of study in a basic collegiate nursing school.

Since 1942, the merit system unit of the Association has engaged in the preparation of effective tests for the use primarily of state and local merit system agencies. (14, p.73)
In the spring of 1950, a student test was prepared for a new purpose: "to assist in measuring the students' knowledge of public health nursing principles upon completion of program in collegiate schools of nursing". (12, p.271)

The examination consists of 180 objective type test items covering twelve subject matter areas. Each item offers five choices from which the student is instructed to choose the best, most correct answer. The items range from simple recall to those designed to test judgment.

The purpose of the test is to sample the subject matter areas in public health nursing principles which should be familiar to a nurse who has had basic preparation and some supervised experience in the field of public health nursing. According to the manual which accompanied the test it can be used to indicate strengths and weaknesses in a student's knowledge of a variety of subject matter areas, to guide individuals and student groups in further study, experience or observation in needed areas, to help in planning courses of study or the sequences of individual or group knowledge, to assist in appraising the curriculum plan, and to aid in choice of reading materials, references, visual aids and new library acquisitions.

The test takes two hours to complete; however, it is not a timed test and sufficient time is allowed to
answer all of the questions. Answer sheets are provided and the test is returned to the Merit System Service to be machine scored. Detailed instructions accompany the tests for handling, administering and supervising the test.

The report from the testing service includes the raw score and the letter grade assigned on a percentage basis for each examinee. It also includes a profile for each student based on her achievement on the test.

The subject matter areas covered in the test include: public health nursing, maternity and infancy, child health, non-communicable disease, communicable disease, venereal disease, tuberculosis, first aid, nutrition, mental health, health education and background of nursing. The profile chart lists these areas at the left of the chart. The average scores of all of the students who have taken this test have been determined for each category and the vertical line perpendicular to a zero point represents that average. The amount by which each student's score deviates from the average score for each area is determined and plotted in her chart. (See Figure I.)

The scores for each student in each area were identified and the group score determined from this. A group profile was then constructed using the group scores.
PROFILE CHART

Punches Indicate Deviations in Standard Score Units from the Average Scores

Below Average  |  Above Average

<table>
<thead>
<tr>
<th>Score</th>
<th>-30</th>
<th>-20</th>
<th>-15</th>
<th>-10</th>
<th>-5</th>
<th>Average</th>
<th>+5</th>
<th>+10</th>
<th>+20</th>
<th>+30</th>
<th>+35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Public Health Nursing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternity and Infancy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicable Disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-communicable Disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venereal Disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Aid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Background of Nursing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1
Profile Chart form used by the Professional Examination Service of the American Public Health Association in reporting students' scores.
ACHIEVEMENT IN THE SCHOOL OF NURSING. For each student in the study a cumulative grade point average has been computed based on the credits and grades earned in the professional courses of the study, as a means of measuring their achievement in the school of nursing.

This computation does not include the courses taken in the pre-professional period since it was ascertained that the students had taken their pre-nursing preparation in so many different schools, the system or reporting achievement and the courses were in no way comparable.

The grade point average for each student was calculated by multiplying the number of credits earned in a course by the number of points allowed for the letter grade earned. The basis for computation is the one used at the University of Oregon and allows four points for each credit earned with an "A" grade; three points for each credit of "B"; two points for each credit of "C"; and one point for each credit with a "D" grade.

For example, a student who takes courses during a term totaling fifteen credits, and who earns "A" grades in all of the subjects has earned a total of sixty points or a grade point average of 4. Another student taking the same courses, and who earns three credits of "A", six of "B" and six of "C", has earned a total of forty-two points or a grade point average of 2.8.
The computation at the end of each term takes into consideration all previous grades and so becomes cumulative.

The mean grade point average for the group is determined by adding the grade point averages of all of the students in that group and dividing by the total number in the group. (See Appendix I, Table I)

One of the main reasons given for any measurement of achievement is to obtain data which serves as a basis for the assignment of marks, for reporting progress and for recommending promotion. This assigning of marks, however, is subject to many influences. According to Micheels and Carnes the factors considered by instructors in assigning marks are as numerous and varied as are types of reports in current use. (28, p. 415)

Educational authorities agree that measurement of achievement should be based upon the students' ability to demonstrate to what degree of learning has taken place. It should be recognized, however, that in actual practice there are differences in instructors, and irrevalent factors such as punctuality, alertness in class and neatness in preparation of papers often determine grades in part. Ross states that in determining any marks, only those factors should be taken into consideration which afford evidence of the degree to which the pupil has attained the objectives set up for that particular course.
The students in this study did not take the same courses of study under the same instructors or situations. Therefore, any marks they may have earned are subject to such variants. However, these marks have been submitted by the instructors and accepted by administrative authorities as indicative of the students' ability and have resulted in placing the students in various recognized categories which have been used as a means of comparing the individual students and the groups of students from the two schools.

IN SUMMARY, the procedure used in this study includes an investigation of literature pertaining to the social aspects of nursing; a study of the curriculum in two nursing schools each of which represents an acceptable pattern of nursing education in degree schools of nursing; and a comparative study of students in each of the programs based on a test designed to measure knowledge of principles of public health nursing. The importance of a supervised field experience in community nursing may be partially demonstrated through such a proceeding. A schematic design of the logical structure of the experiment has been drawn in Figure 2.
SCHEMATIC DESIGN OF THE LOGICAL STRUCTURE OF THE EXPERIMENT

UNIVERSITY OF OREGON SCHOOL OF NURSING
Accredited and integrated program consisting of five clinical areas.
No supervised field experience in public health nursing.

UNIVERSITY OF MINNESOTA SCHOOL OF NURSING
Accredited and integrated program consisting of six clinical areas which includes 23 hours instruction and twelve weeks supervised field experience in public health nursing.

GROUP O
Results measured by APHA Student PHN Test

GROUP M
Results measured by APHA Student PHN Test

FIGURE 2.
CHAPTER FOUR

THE SCHOOLS OF NURSING AND THE STUDENT GROUPS

THE UNIVERSITY OF OREGON SCHOOL OF NURSING. The
school of nursing at the University of Oregon Medical
School is organized on a collegiate basis and is ac-
ccredited by the Oregon State Board for the Examination
and Registration of Nurses and by the National Nursing
Accrediting Service.

The philosophy of the school is progressive, broad
and inclusive. In the school bulletin it is stated thus:

The faculty of the department believes that
nursing provides an opportunity for an
unique contribution to human welfare and
that it is the basic function of the depart-
ment to assist in the development of pro-
fessional nurses, who, through the fulfill-
ment of their professional and personal re-
sponsibilities, will seek to improve the
quality of nursing service in a changing
society. The objectives of the Department
of Nursing Education------are,

(1) to select nursing students whose
interests and aptitudes indicate potential-
ities for success in professional nursing
and to foster the professional development
of these students;

(2) to provide the learning situations
and educational experiences necessary for
the development of professional nurses
capable of providing health services to
patients and their families in hospitals
and the community;

(3) to develop a consciousness, among
its students, of social and professional
problems and the ability to contribute
toward their solution. (49, p.15)
The University of Oregon introduced professional courses in nursing for the first time in the summer session of 1919. In 1926, a five year curriculum in nursing leading to a bachelor's degree was offered. The first two years of this curriculum were planned on the campus of the University of Oregon at Eugene and was followed by two years in nursing in one of two hospital schools of nursing in Portland. A fifth year of specialized study in public health or hospital administration was completed through the Portland School of Social Work.

In 1932, as part of the reorganization of the Oregon State System of Higher Education, the program in nursing was transferred to the University of Oregon Medical School and was organized as the Department of Nursing. A two year curriculum preparatory to the professional program at the Medical School was established at both the University of Oregon and at Oregon State College at Corvallis. Since 1936, the clinical experiences have been centered in the hospitals and clinics at the Medical School center and at the State Hospital in Salem.

As a war-time measure the course was shortened to four years which included four quarters at the University or College. In 1945, in a post-war adjustment, the pre-nursing curriculum was increased to a minimum of five quarters and the present program of a total of sixteen quarters was established.
Students in this basic collegiate program in nursing register for the first five quarters at the University of Oregon, Oregon State College or at another accredited college or university of their choice. This is followed by eleven quarters at the University of Oregon Medical School in Portland. The degree of Bachelor of Science is granted on completion by the University of Oregon or by the institution attended in the preprofessional period.

The pre-nursing curriculum is planned to provide opportunities to build a sound educational foundation through written and spoken English, history, socio-economics, literature and the fine arts, and the biological sciences. Of the total of eighty-two credits required for admission to the professional program, eighteen are liberal arts electives. An average of a "C" grade is required in all of these studies.

The eleven quarter basic professional program is planned to provide opportunities for the students:

1. To develop an understanding of the factors that contribute to the health of the people;

2. To acquire an appreciation of the complex role of the nurse in the team of health workers in modern society;

3. To gain competence in the care of the sick of all ages;

4. To attain the fulfillment of potential capacities through experiences in classrooms, clinical situations, and student and professional activities; and
5. to achieve an understanding of her responsibility as a mature person in her community and in her profession. (49, p.15)

Students may enter the school of nursing at the beginning of the fall or spring quarter and continue to register each term in accordance with university regulations. The grading system consists of four passing grades, "A", "B", "C", "D"; incomplete and failure. Students are considered to be making satisfactory progress as long as they maintain a "C" average. Students dropping below this grade are placed on probation for one term, and if they continue to earn only low grades are requested to resign from the nursing program.

The Student Association, to which all students belong, is a student self-governing body in which all have an opportunity to gain experience in democratic living.

The Curriculum. Each nursing instructor in the School of Nursing has assumed the responsibility for the inclusion of all aspects of patient care in her particular area with presentation at the level of the students' appreciation.

Critical studies and evaluation of the curriculum have been carried out by the faculty from time to time in keeping with the changing demands on nursing education. In 1946, in line with the current thinking relative to "integration" the whole curriculum was studied and changes
made for better presentation or correlation of content. Adjustments within the general pattern laid down at that time have continued to take place as a result of curriculum study.

During an orientation period when the students first come to the Medical School campus, an introduction to the community is planned with the objective of assisting the student to relate her knowledge of general sociology to her new studies in nursing. The place of the modern hospital, the inter-relationship of all community agencies, and the complex functions of the nurse of today are discussed. The student health program is utilized to direct the students' understandings toward normal health and development. Field trips to various community agencies are planned, where this kind of observation has particular merit in all of the clinical areas. Guest speakers and experts are used throughout the program, in the classroom, and on the ward, to bring to the students a broad point of view. Carefully planned case conferences, using community personnel, have been found very beneficial in presenting the needs of patients before, during, and following hospitalization, particularly in connection with tuberculosis nursing at the University State Tuberculosis Hospital.

During the students' assignments to the out-patient clinic from the medical and surgical wards for three
weeks, and from the maternity ward for one week, emphasis has been placed on the needs of the ambulatory patient, and student's thinking is directed toward economic and social problems which enter into medical care plans. During this time also, the students make from ten to fifteen visits to various community agencies and the community planning for health and social welfare is studied. The study of communicable disease is approached from the public health point of view.

A course in Normal Growth and Behavior is included in pediatric nursing at Doernbecher Memorial Hospital for Children. At the same time the students become acquainted with the Oregon program for the education of handicapped children.

During the psychiatric affiliation at the State Hospital, ten hours are spent on mental hygiene, and the students have an opportunity to visit various state institutions in the Salem area.

**Curriculum Study.** The curriculum committee of the faculty of the School of Nursing has recently undertaken a major study of the existing curriculum with the objective of recommending changes that would be essential if the program is to be accredited for the preparation of the graduates for first level positions in public health nursing.
Each course and clinical area has been reviewed. During this process it has been of interest to evaluate the results of previous changes which were concerned with correlation or integration of certain subject matter materials. Of particular interest to this study was an attempt to identify where content which had previously been included in specific courses was now being used in the curriculum. These areas are communicable disease, emergency nursing or first aid and the social and health aspects of illness and disease.

Special and Health Aspects of Nursing. Up until 1948, the State Board of Nurse Examiners had required that some course be included in the curriculum concerned with nursing and health services in the family. Introduction to Methods in Public Health Nursing met this requirement. It consisted of thirty-three hours of class including a few selected field trips. As it became permissable to do away with a block of class work when the content came to be coordinated into all of the clinical areas, approximately two-thirds of this one course content was placed elsewhere and one third was retained for a concentrated group of field trips to community health and welfare agencies.

A public health faculty member was appointed who taught some of the classes but spent more time assisting all of the instructors, until the majority of the
responsibility was assumed by the whole faculty for content relating to the social and emotional aspects of patient care.

It is difficult to point specifically to where such aspects can be found in the curriculum nor would it be desirable to do so. Good curriculum planning should present for the students' consumption and integration that information which will assist them to develop their own appreciations.

It is of interest to note that during the recent curriculum study at least sixty-seven hours were found to relate in some way to the social and emotional aspects of nursing. These were located scattered throughout the whole program, - fourteen in nursing arts, twenty-nine in medical and surgical nursing, three in obstetrics, eight in the course in communicable diseases, eight in tuberculosis nursing and five in pediatric nursing. Psychiatry was not listed because the information was not available.

Emergency Nursing. Until 1949, Emergency Nursing had been a required course in the basic curriculum. Quite frequently it was taught as the Red Cross First Aid course, and given two hours credit. Because of the requests based on joint study by faculties of schools of nursing in Oregon the State Board of Nurse Examiners removed it as a requirement and stated that the content
could be introduced wherever it seemed to belong. For example, instruction in artificial respiration is included in the study of respiratory conditions; the care and splinting of fractures in orthopedic nursing; and the care of burns in the study of dermatological conditions.

During the recent study, fourteen hours were identified wherein some aspect of emergency nursing was being taught, - two in nursing arts, nine in medical and surgical nursing, two in operating room, and one in pediatrics. Again, there is no report for psychiatry.

*Communicable Disease.* Educational patterns in communicable disease nursing are changing in line with new developments in this area. The incidence of communicable diseases has steadily decreased because of greater knowledge and application of control measures. Much concern has been expressed over the dearth of available experience in the common communicable diseases for nursing students. The question arises, are affiliations for this experience an absolute necessity? Are communicable diseases to be found only in communicable disease wards or hospitals? And we realize that such diseases are found anywhere. All persons, regardless of their present state of health, are potential victims of disease spread by living organisms. The acceptance of this hypothesis is the basis of our health laws, immunization and health education programs and should be the foundation of techniques in the care
of all patients.

An understanding of all communicable disease cannot be adequately covered in the two specific courses in the curriculum identified as "Public Health and Communicable Disease" and "Tuberculosis Nursing". The conscious stress on communicable disease control measures labelling them as such, throughout the whole present curriculum would make it more meaningful and valuable to the student. Therefore, integration of communicable disease nursing in the curriculum of the nursing school is the responsibility of each instructor.

During the recent study twenty-seven hours of content were specifically concerned with communicable diseases, two in nursing arts, four in medical and surgical, two in operating room, ten in Public Health and Communicable Disease, none in obstetrics, five in tuberculosis nursing, four in pediatrics.

It has often been difficult to differentiate between the pathological and sociological implications of communicable diseases as these are discussed in various situations. But a conscious attempt was made not to list the time spent under more than one heading.

Public Health Nursing. A supervised field experience in community nursing is not yet available for students in Oregon because of the lack of facilities for such an assignment. This has been of concern to nursing
educators for some time since this type of experience has been recognized and accepted as a valuable addition to a curriculum, particularly in collegiate programs in nursing.

Both official and voluntary health agencies in Portland have in the past attempted to meet the requests of various schools of nursing in making available some observational opportunities in public health nursing. No one plan has proven satisfactory to the agencies and to the schools seeking this experience for their students.

In 1948, the Oregon State Nurses Association, together-with other interested groups, undertook a study of nursing resources, needs and educational facilities in Oregon. Included in the recommendations regarding schools of nursing is the following:

The addition of a sixth clinical area should be considered for all students. This could be in public health nursing, tuberculosis nursing or in nursing in small community hospitals.

A thorough investigation into these areas has resulted in the following comments and recommendations to guide the development of these areas.

A. The sub-committee considering public health nursing has recommended the following:

1. That continued study of this area be carried out by the existing committee ---and expanded to include all interested groups---.

2. That this committee be attached to whatever group carries on continued study of nursing needs in Oregon.
3. Since no agency is able to provide a block of experience for basic nursing students other than the isolated type of observational experience—this should be open to all basic nursing schools, the schools to select the student or students who will get this experience.

4. That any experience that is the responsibility of a community agency should be planned through the committee to avoid confusion and to utilize possible opportunities.

5. That when community facilities are such that a three months clinical experience can be planned that priority be given to students in the degree programs. (40, p.25)

This committee continued to function as a sub-committee of the Joint Committee for the Improvement of Nursing Service until the reorganization of the nursing associations in Oregon in October 1952. It is now an interdepartmental committee of the Oregon League for Nursing and is called the Community Health Experience Committee.

The aim of this committee continues to be to plan for experiences outside of the hospital for basic nursing students. It was decided early in their deliberations that if Oregon schools of nursing waited for the ideal situations for a clinical experience in community agencies, such an addition to the curriculum would be postponed far into the future. Making the best possible use of available services for educational experiences is not without precedent in planning for such field opportunities. The committee has, therefore, established general
policies and procedures through which the schools of nursing have indicated what students are available for observation of public health nursing, and the agencies have indicated how many students each can handle. Because the requests at first exceeded the opportunities available, students in the collegiate schools were given priority. As more opportunities became available the committee was able to establish priorities for experience. The following are summarized from the committee minutes for a meeting on January 14, 1953:

Priorities for the available opportunities for observation and experience were discussed and the following agreed upon:

1. Graduate nurse students preparing for public health nursing positions - three months.
2. Basic nursing students in a collegiate program working toward accreditation for preparing the beginning public health nurse.
3. Graduate nurse students preparing for faculty positions.
4. Basic nursing students - degree and diploma.
5. Faculty currently employed.
6. All others.

Beginning in the fall of 1951, agencies giving public health nursing services in the Portland area, have been able to accept students for one week of observation. By June 1952, approximately 130 students had had
such an experience. Up to July 1, 1954, assignments have been made for 364 students. County health departments have found it possible to accept students for observation whose homes are in their area, and the schools have been interested in this development because it has increased the opportunities, at the same time solving the problem of housing which is of concern when the students leave the vicinity of the home school. Gradually, more and more opportunities have been developed for student observation, and while it seems that no increase in the length of time is possible at the present time, it is recognized that a very workable groundwork has been established for student nurse experience in community nursing in Oregon.

The current trend is toward shortening, rather than lengthening, the time spent in a nursing program. It is desirable that the length of time required in a baccalaureate program in nursing be no longer than other college programs, such as the preparation for teaching. In order to provide for a minimum of eight weeks of experience in a community nursing agency in the nursing program, it will be necessary to do a careful evaluation and rearrangement of the present content. It is desirable also, to provide a closer correlation between the biological and social sciences and comprehensive patient care.
The curriculum can be strengthened by the deletion of repetitious subject matter and enriched by the addition of a continuing emphasis upon developing interpersonal and intergroup relationships, of improved communication skills, and of a more inclusive appreciation of the meaning of illness or health to the individual, his family, and the community.

GROUP 0. The ten students which constitute Group 0 completed the prescribed course of study in December 1952, and were graduated in June 1953.

The original class of seventeen students entered the School of Nursing in March 1950. During the first quarter, one student withdrew to complete her education in another field. Two students were requested to resign because of failure in academic achievement. Two students withdrew to be married and are completing their studies in a later class. One student withdrew from this class and is completing her course with the following diploma class. One student transferred into this class from another school but is not included in Group 0 since she did not complete the APHA test.

In summary, of the eighteen students in the class, four or twenty-two percent were lost to nursing; three are completing their course of study at a later date. The following analysis will include only those students who completed the course in December 1952, and who also
completed the American Public Health Association Student Public Health Nursing Test.

This group of students can be considered as representative of the student body. They were neither outstanding nor below average in any respect.

THE UNIVERSITY OF MINNESOTA SCHOOL OF NURSING. The University of Minnesota School of Nursing was the first university school of nursing in the world. Established in 1909, this was an unique departure from existing nurses training programs, and has continued to keep pace with changing needs in nursing.

The basic collegiate program is accredited by the Minnesota State Board of Examiners of Nurses and by the National Nursing Accrediting Service. In January 1954, the school received further approval of their program which now prepared their students to do first level nursing in any clinical situation including public health nursing upon graduation.

A democratic philosophy of education with its concept of the social role of education in a democratic society, its emphasis upon the inherent worth of the individual and the dignity and value of human life, and its acceptance of the task of building free citizens who strive not only for their own rights and liberties but for those of others, and who assume the responsibilities and obligations of free citizenship, best expresses the general educational philosophy of the faculty. (48, p.5)

Originally the school carried a basic three-year
curriculum leading to a degree of graduate in nursing. In June 1919, a curriculum leading to the degree of Bachelor of Science and Graduate in Nursing were established. Until 1949, both a basic and a bachelor of science curriculum had been carried. (48, p.6)

Beginning with the class admitted to the basic professional program in the fall of 1949, a four year sixteen quarter curriculum was established which replaced the former 18 quarter curriculum. In the 18 quarter program each student had, in addition to preparation for professional nursing, a major in nursing education or public health nursing. The new program shifted the emphasis to an improved general education background with a major in general nursing preparing nurses to function in any beginning position under supervision.

The pre-nursing curriculum is planned to give a broad educational background through study of written and spoken English, sciences, history, socio-economics, physical education and psychology. From 30 to 44 credits may be taken in electives.

The admission requirements to the School of Nursing are certain specified subjects plus electives, totaling 95 quarter credits. These may be taken in any accredited college or university and transferred to the University of Minnesota. It also required that the student maintain a grade average of "C" in these studies.
The ten quarter basic professional program in the School of Nursing constitutes the major in the curriculum leading to the Bachelor of Science Degree.

Students may enter the School of Nursing at the beginning of the fall or spring quarter and while in the school register each quarter and receive grades in accordance with the university plan. The passing grades are "A", "B", "C", and "D". A student is considered to be making satisfactory progress as long as she receives a passing grade in each required subject and an average of "C" for the total.

The student body is represented on all faculty committees. The leading student organization of the school is the College Board which cooperates with the faculty in student affairs.

The Curriculum. Each instructor in the School of Nursing has the responsibility for the inclusion of all aspects of total patient care in her particular area. The public health nursing faculty member is available to assist the other instructors at all times or to be responsible for specified content.

The introductory course in clinical nursing includes 12 to 14 hours taught by the public health faculty. This material includes historical and evolving concepts of social welfare as it applies to students as individuals,
citizens and nurses; an introduction to community health work in the local, state, federal and world health programs; introduction to health teaching and the use of conversation in nursing; introduction to community sanitation and the use of statistics as they relate to care of communicable disease in the hospital and home. An early introduction to public health nursing as it relates to communicable disease control is presented by means of discussions and films. (48, p.30)

The instructor in psychiatric nursing meets with the students once a week to discuss emotional growth and development. This material is presented from the point of view of the student's role in her relationships with her family, her co-workers and her patients. Through informal discussion and the use of various group techniques, the students become aware of their reactions as members of the group to the group and those outside it.

The students go to the outpatient department early in their studies to observe patients there. They wear street clothes and mingle with patients as if they were patients themselves. They are directed to be observant of the patients' feelings and behavior.

The instructors in medical and surgical nursing endeavor to include in every lecture the factors which contribute to comprehensive patient care. Several panel presentations are planned by the students in which they
correlate their knowledge of hospital care with information regarding community facilities available for patient care.

The geriatrics panel includes such areas as shelter, finances, recreation, social services, medical care and nutrition as they relate to older aged citizens today.

In the cancer panel, emphasis is placed on cancer control programs of voluntary and governmental agencies, the emotional adjustments necessary for the cancer patient, and care of the patient with terminal carcinoma. Observations for students are available at the cancer detection center, nursing homes and other community resources.

An assignment in conjunction with maternity nursing includes attending pre-natal clinics on the outpatient department. Here each student meets a patient whom she observes and cares for during the pre-partum period and during hospitalization. Visits are planned to the patient's home before and after the delivery of the baby. These experiences are shared with other classmates and instructors.

**Public Health Nursing.** The students register for 28 credits of public health theory and practice.

A total of fifteen credit hours is given by the faculty of the School of Public Health and include the courses, *Elements of Preventive Medicine and Public*

The pre-requisites required for the program for graduate nurses in public health nursing by the School of Public Health are also required by the School of Nursing. These include sociology or social sciences, history or political science or economics, psychiatry and anthropology.

During the last six months in the program each student is assigned to a field experience of eight weeks in public health nursing. Since 1932, all students in the degree program have had six weeks of experience in some community nursing agency in Minneapolis or St. Paul. Since a minimum of eight weeks is required for an acceptable experience and since all students could not be accommodated in the Twin City area, the Minnesota State Department of Health has made ten rural county health services available for student experience. In addition to the public health nursing experience, each student has four weeks in a rural hospital preferably in the same community as the community nursing service agency.

GROUP M. The thirty-five students which constitute Group M completed the prescribed course of study in March
1953, and were graduated in June of that year.

The class entered the School of Nursing in September 1950. There were 47 students in the original class. Two withdrew for a year and re-entered with a later class; three more withdrew for personal reasons, one to be married. Five students discontinued because of poor scholastic achievement. One student became ill and will complete the course at a later date.

In summary, of the class of 47 students, eight or seventeen percent have been lost to nursing. Three will complete the nursing course at a later date. Three students did not take the American Public Health Association Test since this is not compulsory. One student did not complete the test. The following analysis will include these students who completed the course of study in March 1953, and who also completed the APHA Test.
CHAPTER FIVE

ANALYSIS AND INTERPRETATION

Changing concepts of health in the nation have created a growing awareness of the need for concerted action by nursing schools to educate nurses able to participate in the planning and to meet the requirements of a dynamic society. The preparation of nurses in the basic curriculum to work in the community as well as in the hospital is one of the most recent trends in nursing education aimed at achieving optimum goals.

The importance of a field experience in community nursing in contributing to nursing students' appreciations of patients' needs has been the thesis of this study.

A review of nursing literature indicates a mounting realization of the place of sociological concepts in planning for comprehensive patient care. The final concept of public health nursing has not yet emerged.

There is every reason to expect it will continue to change in an effort to meet the needs of our changing society. (10, p.vi) A wealth of evidence points at the present time to the value and importance of the integration of the health and social elements of nursing into the basic nursing curriculum.

How best to provide for this integration is a problem for nursing education. How best to approach it in
one school of nursing is of concern in this study. The school is presently engaged in curricular study preparatory to major changes which will enhance the potential contribution of their graduates in broader fields of nursing service.

The curriculum of the school has been examined in relation to changes which were recommended several years ago for the integration of subject matter concerned with the social and health aspects of illness. It has been compared to the criteria and characteristics required by nationally established standards and with one school which has already met the qualifications.

THE SCHOOLS OF NURSING: The programs of study in the two schools of nursing, the University of Oregon School of Nursing, and the University of Minnesota School of Nursing, are apparently very much alike. Statements of philosophy and purpose found in the bulletins of the two schools show an acceptance of responsibility for a broad and inclusive educational experience for their students.

Both schools are in state universities where the administrative responsibility and academic rating are comparable to other schools in the systems. In both schools the faculty personnel have approximately the same rating and responsibility.

Both schools have definitely stated policies
regarding selection and admission of qualified students, provide adequate housing, and plan for orientation and counseling services throughout the program. Students are included on all school committees at the University of Minnesota. At the University of Oregon Medical School students are requested to work with faculty personnel on committees where they can make a contribution. Both schools encourage student participation in student government and provide a most permissive atmosphere in the residences, the classrooms, and in clinical situations.

The curriculum is planned in both schools to provide a broad general education on a university level preparatory to a professional program of study which meets both state requirements and national standards.

Clinical experience is provided in large general hospitals, and affiliation for special experiences are provided when these are not available in the home hospital.

The one outstanding difference between the two schools of nursing is the classroom theoretical presentation and the field experience in public health nursing which provided by the University of Minnesota School of Nursing and which are not found at the University of Oregon School of Nursing.

Two groups of students which seem to be representative of the student bodies have been selected in the
schools. These students have been examined as to their general achievement in the nursing schools, and as to their achievement on a test prepared to examine students' knowledge of principles of public health nursing. By comparing the rating of a group of students at the University of Oregon School of Nursing with national scores, and with scores of a group of students who have had a supervised field experience in public health nursing at the University of Minnesota School of Nursing, it is anticipated that certain findings may be of value in curricular study.

ACHIEVEMENT IN THE SCHOOLS OF NURSING. One measurement of scholastic achievement is based on grades earned in the various courses of the study. An average grade point can be computed by allowing a certain number of points for each credit earned in each grade category and averaging the total.

The cumulative grade point average has been determined for each student based on the grades she earned in the courses given in the school of nursing. The points allowed have been four for "A", three for "B", two for "C", and one point for a "D".

In Group O, the range in cumulative grade point averages is from 2.78 to 3.66. The mean is 3.12.

In Group M, the range is from 2.22 to 3.57. The mean is 2.90.
The percentage distribution of the individuals in the two groups, based on the grade point averages, is graphically shown in Figure 3. Achievement in the nursing programs attained by these students, as indicated by their cumulative grade point averages, is much alike.

**COMPARISON OF RATING OF STUDENTS ON APHA STUDENT PHN TEST.** The problem posed in this study, which is concerned with evaluating to what extent student nurses gain certain social concepts, has been approached through the use of a test prepared to measure basic knowledge of public health nursing. This test has been administered to two selected groups of students whose achievement in nursing programs seem much alike.

In **GROUP O**, the scores on the test range from 97 to 138. The average raw score is 120.7, with standard deviations of 14.58.

In **GROUP M**, the scores range from 108 to 159. The average raw score is 130.34, with standard deviation of 11.51. A comparison of these scores with the national scores is shown in Table 2.

**Frequency Distribution.** A graphic representation of the frequency distributions of the two groups of students is shown in Figure 4. It is evident that there is considerable overlapping of the individuals in the two groups. Figure 4 also shows the percentage
Figure 3. Percentage Distribution of individual grade point averages in Group O and Group M.
Figure 4. Frequency distribution of individual APHA Test scores in Group O and Group M, and percentage distribution of national test scores.
distribution of the national scores represented by a smoothed frequency curve equivalent to the sample size of Group M. Examination of this graph indicates Group M rates higher than the national average and higher than Group O on the average. It is also noted that Group O is included within the national curve.

Group Profiles of Performance. In addition to the report of raw score, percent score and latter grade returned for each student, a profile card is also received. These profiles are constructed by determining the deviation of a student’s score above and below the average of the group in terms of standard score units.

Standard scores are arrived at by a statistical procedure which equalizes out the differences in difficulty and differences in variability of scores on different tests, and makes possible direct comparison of scores. (13, p.11)

A group profile has been constructed by determining the average score in each subject matter area for each group. Analysis of these profiles are considered in relation to two questions. Is Group M consistently better throughout or greatly better in a few areas? Is Group O consistently average, or are there compensating strengths and weaknesses?

The profiles, shown in Figure 5, reveal that Group M scores are consistently above average, and are better
<table>
<thead>
<tr>
<th>Total Score</th>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Public Health Nursing</td>
<td></td>
</tr>
<tr>
<td>Maternity and Infancy</td>
<td></td>
</tr>
<tr>
<td>Child Health</td>
<td></td>
</tr>
<tr>
<td>Communicable Disease</td>
<td></td>
</tr>
<tr>
<td>Non-communicable Disease</td>
<td></td>
</tr>
<tr>
<td>Venereal Disease</td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td></td>
</tr>
<tr>
<td>First Aid</td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td></td>
</tr>
<tr>
<td>Health Education</td>
<td></td>
</tr>
<tr>
<td>Background of Nursing</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5. Group Profiles showing below average, average and above average rating by subject matter areas of Group 0 and Group M.
than Group O in all but two areas, - Communicable Disease and Venereal Disease. The two groups rate the same above average score in Backgrounds of Nursing.

Group O profile shows a definite tendency toward a wide swing of above and below average scores with four outstanding weak areas and two strong areas.

Further analysis was attempted by plotting the individual scores in subject matter areas for each student in Group O on one profile. No definite pattern evolved. It was evident that there is great variation within each student's score, or that the total score of the individual conceals great variation from one subject to another.

Group O does not rate as high as Group M, although their average ratings are within the national curve. The areas in which Group O rates above average and in two instances above Group M compensates for four areas in which they rate well below average.

Consideration of these weak areas indicates that two of them, - Maternity and Infancy, and Non-Communicable Diseases relate to major clinical areas in the nursing curriculum. The other two areas, - First Aid and Health Education, relate to content which may be found throughout several courses in the curriculum.

It will be of interest to investigate what can be done or is being done in the hospital situation at the present time relating to the four areas listed above,
assuming from the findings that they may be weak areas in
the curriculum. It will also be of interest to explore
how a field experience in public health nursing may
strengthen or enrich such areas.

Maternity and Infancy. The nursing experience in
care of mothers and infants consists of eleven weeks
divided into four areas, - birthroom, nursery, general
care of mothers on the ward, and observation in the pre-
natal, post-partum and well-baby clinics in the Out-
patient Clinic. While in the Outpatient department each
student observes one mothers' class and has the opportuni-
ty to teach one class.

Some changes have already taken place since Group 0
had their maternity nursing experience. These have in-
cluded a change in teaching personnel and some course
content. The method of presentation of content is being
explored at the present time. More student planning
and participation has resulted in an obvious response
and greater enthusiasm for the subject. The students
are also permitted much more leeway than previously in
planning and conducting the mothers' classes. A brief
presentation and discussion of principles of teaching and
learning is now a preamble to the formal and informal
patient teaching in the maternity department. This could
be enlarged advantageously into a course which would
provide the opportunities to develop real skills and teaching techniques.

Areas which are not now utilized but could be employed to strengthen students' understandings and which could be found in the hospital or in the community include,

(a) More time in well-baby clinics to observe normal growth and development of infants, and the important relationship between mother and infant and between mother, infant and the doctor;

(b) Visits to homes where teaching can go on in a more natural setting than the hospital provides and where the student can gain a better appreciation of the family as a unit and how this new baby fits into it. A series of planned visits to one home would provide a picture of continuity of care and teaching which seems no longer possible in a hospital since patients go home much sooner than a few years ago.

Since care of mothers and infants is likely the most natural and happy situation students may encounter in the hospital or the home, Maternal-child health should be one of the strongest areas in the nursing curriculum.

Non-communicable Disease. This category of diseases as it relates to public health likely includes a wide array of the chronic long-term physical and mental diseases
usually found in the older age groups. Geriatrics is rather a new concern in public health and is posing some serious problems in program planning. These diseases as they have come to be recognized as problems of public as much as individual concern are involving larger and larger numbers of our citizens and are costly to society. They do not respond to the same approach as used so successfully against the communicable diseases. Instead of mass programs of public sanitation, immunization and group controls these diseases must be approached on a more individual basis. Early detection, more easily available diagnostic facilities, and provisions for long-term and terminal care have not yet been successfully accomplished in our society.

Students whose experiences have been limited to care of patients in the hospital are unable to appreciate all the ramifications of chronic illness. Observations of the ambulatory patient in the Outpatient Clinic setting, of patients under custodial care in nursing homes and institutions, and of old folk managing to live in their own homes on a minimum income, all have value for the student.

**Emergency Nursing or First Aid.** This is an area which has been previously discussed in relation to course content which is supposedly dispersed throughout the curriculum. The question is raised whether enough time
being spent on this subject since by actual count it has dropped from twenty-two to fourteen hours.

There are numerous areas in nursing where it is important for the nurse to be skilled in care of emergencies. Appreciations of these could easily be strengthened without the addition of more time for instruction. It is more a matter of emphasis.

The students do not have experience in an emergency admitting department since none is available in the hospital where they would usually have such an opportunity. Arrangements to provide such an opportunity should be given consideration.

Opportunities which would further strengthen students' appreciations of emergency techniques would be available if an affiliation in a rural hospital were made available. Observation in an industrial first-aid station would also be valuable.

Health Education. Because nurses are associated with people under many and varying situations it has been said that they occupy a key position in the educational process. (51, p.279) No other group of workers has so great an opportunity to influence the living habits of the people in a community. To utilize these opportunities and to make her contribution as effective as possible should be the aim of each nurse whether in the hospital,
clinic, school, industry or visiting in the homes. This requires skill, tact, patience, the power of observation, and an understanding and appreciation of people's limitations. Not all nurses possess these skills, nor do they recognize opportunities for teaching. Various studies both by nurses and by others demonstrate that nurses are not all good teachers. They teach with the least ease and skill of any of their various duties. How to improve the teaching skills of nurses is a question confronting nursing education today.

The idea that a nurse could and should enter into the instruction of the patient has not always been acceptable to the doctor. Only as she becomes skilled and able to recognize patients' needs will the nurse win for herself the right to enter into equal term relationships.

The choice of the nurse is not whether or not she will teach since she teaches unconsciously by her very appearance, act and word. Her choice can be how good her conscious teaching will be.

The basic curriculum can definitely be enriched through the inclusion of many of the skills which have been adopted and improved by social workers, such as techniques of interviewing, of purposeful conversation and of case work methods. More opportunities should be found in the hospital for patient teaching, like the individual who is diabetic or has heart disease. Since
health teaching is now a more acceptable procedure in community nursing situations, every opportunity should be utilized to make these available often enough so the student may develop her own skills and appreciations.

All areas of the curriculum can be investigated in the manner which has been employed to study the four which have appeared to be weak for this particular group of students.

SUMMARY. An examination of the scores the students made on the American Public Health Association Student Public Health Nursing Test indicated that the students who have had a supervised field experience in public health nursing tested significantly higher but not greatly higher than the students who have not had such an experience.

In addition, certain observations were made from an analysis of which particular subject matter areas on the test contributed most heavily to the differences in rating. The students who had had an experience in public health rated consistently high in all areas of the test. The students who had not had such an experience rated on an average within national scores for the test, but were not consistently average in all areas. The profile of performance for this group indicated compensating strengths and weaknesses within the scores.
The University of Minnesota students in this study show a consistently higher than average measure of knowledge of principles of public health nursing, which may be interpreted as indicative of their concepts of the social aspects of disease and health, and the importance of their experience in community nursing.

A rather detailed analysis of the weak areas observed in the rating of the University of Oregon students has been used to indicate how the curriculum can be improved for future student groups.
CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

In view of the definite trend toward inclusion of a supervised field experience in public health nursing in the basic curriculum in degree schools of nursing, this study was undertaken to examine the importance of this kind of experience.

Since the demands for qualified public health nursing personnel far exceed the supply which can be provided through the traditional pattern of education known as "the year's program" or as "a program of study with a major in public health nursing" (11, p. 624) it seems that qualified university schools of nursing can assume increasing responsibility for this challenge to nursing education. Preparation for employment in public health nursing can therefore become an important function of degree schools of nursing.

As nursing has kept pace with the broadening demands for medical care, the nurse must have the ability to function competently under a larger variety of circumstances in the hospital and the community. It has also been pointed out that she must approach the family as a unit for health care and can no longer be concerned only with the patient she sees in the hospital.

The hospital which has provided the practical learning situations in nursing education has also shown change. It
is fast becoming a specialized diagnostic center where the cost of care is becoming prohibitive. The use of early ambulation and the place of new chemotherapy have definitely shortened the patient's hospital stay. All of this augments the realization that every available avenue for experience should be utilized by nursing schools. Nursing homes and rural hospitals should perhaps be used as well as community nursing agencies.

The abilities, understandings and skills which are developed by nursing students having experience under various circumstances are somewhat intangible. They are not readily measured by a paper and pencil test, yet they are essential learning outcomes of any curriculum whose objective is that of preparing professional nurses who have an unique contribution to human welfare.

Conclusions which can be drawn from the curriculum study and comparison of students who have had differing educational experiences as developed in this study can be summarized as these:

1. A field experience in public health nursing has an appreciable relationship to the knowledge students have of principles of public health nursing.

2. An experience in public health nursing may have produced a consistently higher appreciation of the social concepts held by some of the students.

3. Students who have not had experience in community nursing show no consistent
pattern in the extent to which they have gained social concepts of nursing.

In summarizing the conclusions of this study, it was found that the field experience in public health nursing itself seemed an influence on the extent to which nursing students gained certain social concepts. From the facts presented it would also appear that, since both groups of students are well within or above the national curve which represents all students tested, the whole curriculum in the schools of nursing has made a contribution to the integrated learning these students demonstrate.

RECOMMENDATIONS. In the light of the findings and conclusions presented in this study, it is recommended that immediate steps be taken to include a supervised field experience in public health nursing in the curriculum of the University of Oregon School of Nursing. The objective of such an important addition to the program would be first to prepare graduates who are competent and capable in any nursing service, and secondly to prepare graduates who can be immediately employed for badly needed service in public health nursing.

The findings presented in this study did not include sufficient evidence to support the proposition that the lack of a supervised field experience in public health nursing alone contributed to the weak areas in the University of Oregon students' rating. Therefore, it is further
recommended that more data be collected and analyzed to determine if the four areas pointed to constitute consistently weak areas in the curriculum.

The addition of a new experience in public health nursing to the curriculum cannot be counted upon to produce all of the desired outcomes of a broadened program. It will therefore be necessary to continue to study need for changes and to relate proposed new content to what has already produced a basically strong collegiate nursing program.
BIBLIOGRAPHY


40. Meeting the needs for nursing services in Oregon. Portland, mimeographed, April 1950. 32p.


APPENDIX I

Table 1

CUMULATIVE GRADE POINT AVERAGES

<table>
<thead>
<tr>
<th>GROUP O</th>
<th>GROUP M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification Number</td>
<td>Identification Number</td>
</tr>
<tr>
<td>Number</td>
<td>G.P.A.</td>
</tr>
<tr>
<td>1.</td>
<td>3.23</td>
</tr>
<tr>
<td>2.</td>
<td>2.92</td>
</tr>
<tr>
<td>3.</td>
<td>3.42</td>
</tr>
<tr>
<td>4.</td>
<td>3.01</td>
</tr>
<tr>
<td>5.</td>
<td>2.84</td>
</tr>
<tr>
<td>6.</td>
<td>3.57</td>
</tr>
<tr>
<td>7.</td>
<td>3.57</td>
</tr>
<tr>
<td>8.</td>
<td>2.95</td>
</tr>
<tr>
<td>9.</td>
<td>2.88</td>
</tr>
<tr>
<td>10.</td>
<td>2.78</td>
</tr>
<tr>
<td>11.</td>
<td>2.68</td>
</tr>
</tbody>
</table>

Range
2.78 - 3.66

Mean
3.12

Range
2.22 - 3.57

Mean
2.90
## APPENDIX II

### Table 2

**APHA STUDENT PUBLIC HEALTH NURSING TEST**

<table>
<thead>
<tr>
<th>No.</th>
<th>Raw Score</th>
<th>Percent Score</th>
<th>Letter</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>115</td>
<td>64</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>97</td>
<td>54</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>115</td>
<td>64</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>132</td>
<td>73</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>107</td>
<td>59</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>138</td>
<td>77</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>120</td>
<td>67</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>136</td>
<td>76</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>138</td>
<td>77</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>109</td>
<td>61</td>
<td>D</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Raw Score</th>
<th>Percent Score</th>
<th>Letter</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>112</td>
<td>62</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>137</td>
<td>76</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>108</td>
<td>60</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>130</td>
<td>72</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>136</td>
<td>76</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>132</td>
<td>73</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>132</td>
<td>73</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>139</td>
<td>77</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>156</td>
<td>86</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>124</td>
<td>69</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>126</td>
<td>70</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>140</td>
<td>78</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>135</td>
<td>75</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>130</td>
<td>72</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>125</td>
<td>69</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>130</td>
<td>72</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>117</td>
<td>65</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>128</td>
<td>71</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>136</td>
<td>76</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>145</td>
<td>81</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>130</td>
<td>72</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>120</td>
<td>67</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>122</td>
<td>68</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>140</td>
<td>78</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>111</td>
<td>62</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>116</td>
<td>64</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>126</td>
<td>70</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>139</td>
<td>77</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>137</td>
<td>76</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>136</td>
<td>76</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>159</td>
<td>88</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>127</td>
<td>71</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mean</th>
<th>Average 67.05</th>
<th>Mean</th>
<th>Average 71.62</th>
</tr>
</thead>
<tbody>
<tr>
<td>120.70</td>
<td>Range 4B 132-138</td>
<td>130.54</td>
<td>Range 3A 145 plus</td>
</tr>
<tr>
<td>97-138</td>
<td>Stan.Dev. 3C 115-120</td>
<td>108-159</td>
<td>Stan.Dev. 15C 112-131</td>
</tr>
<tr>
<td>14.59</td>
<td>3D 97-108</td>
<td>11.51</td>
<td>4D 103-111</td>
</tr>
</tbody>
</table>
### APPENDIX III

#### Table 3

APHA Student PHN Test Scores by Subject Matter Areas rated Average, Below and Above

<table>
<thead>
<tr>
<th>Group 0</th>
<th>Student</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td></td>
<td>-4</td>
<td>20</td>
<td>-4</td>
<td>12</td>
<td>-12</td>
<td>-16</td>
<td>0</td>
<td>+16</td>
<td>-16</td>
<td>-10</td>
<td>+1</td>
</tr>
<tr>
<td>Principles of Public Health Nursing</td>
<td></td>
<td>-12</td>
<td>18</td>
<td>-10</td>
<td>+12</td>
<td>+4</td>
<td>+26</td>
<td>-32</td>
<td>+12</td>
<td>-4</td>
<td>-4</td>
<td>+0.6</td>
</tr>
<tr>
<td>Maternity and Infancy</td>
<td></td>
<td>-10</td>
<td>16</td>
<td>-4</td>
<td>+10</td>
<td>-16</td>
<td>+4</td>
<td>-4</td>
<td>-10</td>
<td>-4</td>
<td>-22</td>
<td>-7.2</td>
</tr>
<tr>
<td>Child Health</td>
<td></td>
<td>+6</td>
<td>-6</td>
<td>+2</td>
<td>+16</td>
<td>+3</td>
<td>+38</td>
<td>+24</td>
<td>+16</td>
<td>+8</td>
<td>+2</td>
<td>+10.2</td>
</tr>
<tr>
<td>Non-communicable Disease</td>
<td></td>
<td>-6</td>
<td>+23</td>
<td>+12</td>
<td>-2</td>
<td>-22</td>
<td>-2</td>
<td>+8</td>
<td>-2</td>
<td>+20</td>
<td>-16</td>
<td>-2.6</td>
</tr>
<tr>
<td>Communicable Disease</td>
<td></td>
<td>+12</td>
<td>+6</td>
<td>+12</td>
<td>0</td>
<td>-12</td>
<td>+6</td>
<td>+12</td>
<td>+18</td>
<td>+30</td>
<td>+12</td>
<td>+9.6</td>
</tr>
<tr>
<td>Venereal Disease</td>
<td></td>
<td>+4</td>
<td>-10</td>
<td>-10</td>
<td>+4</td>
<td>-12</td>
<td>+4</td>
<td>-18</td>
<td>+24</td>
<td>+10</td>
<td>+10</td>
<td>+2</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td></td>
<td>-2</td>
<td>-8</td>
<td>-8</td>
<td>+6</td>
<td>-2</td>
<td>+12</td>
<td>+12</td>
<td>+12</td>
<td>-2</td>
<td>-2</td>
<td>+1.8</td>
</tr>
<tr>
<td>First Aid</td>
<td></td>
<td>-12</td>
<td>-12</td>
<td>-4</td>
<td>+4</td>
<td>-12</td>
<td>+4</td>
<td>+4</td>
<td>-4</td>
<td>-12</td>
<td>-5.6</td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
<td>-8</td>
<td>-3</td>
<td>0</td>
<td>-8</td>
<td>-8</td>
<td>+6</td>
<td>-22</td>
<td>+6</td>
<td>+34</td>
<td>+6</td>
<td>-0.2</td>
</tr>
<tr>
<td>Mental Health</td>
<td></td>
<td>-20</td>
<td>-14</td>
<td>-8</td>
<td>+20</td>
<td>-4</td>
<td>+20</td>
<td>+14</td>
<td>+16</td>
<td>+4</td>
<td>-4</td>
<td>+2.4</td>
</tr>
<tr>
<td>Health Education</td>
<td></td>
<td>-6</td>
<td>-18</td>
<td>+6</td>
<td>-6</td>
<td>-2</td>
<td>-6</td>
<td>+6</td>
<td>+12</td>
<td>-18</td>
<td>-3.8</td>
<td></td>
</tr>
<tr>
<td>Backgrounds of Nursing</td>
<td></td>
<td>+8</td>
<td>-16</td>
<td>-4</td>
<td>+6</td>
<td>-10</td>
<td>+20</td>
<td>+6</td>
<td>+8</td>
<td>+8</td>
<td>-20</td>
<td>+4</td>
</tr>
</tbody>
</table>
**Table 3 - Continued**  

**APHA Student Test Scores**  

by  

*Subject Matter Areas Rated Average, Below and Above*

**GROUP M**

<table>
<thead>
<tr>
<th>Student</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>-8</td>
<td>+16</td>
<td>-10</td>
<td>-10</td>
<td>+8</td>
<td>+12</td>
<td>+12</td>
<td>+18</td>
<td>+32</td>
<td>+4</td>
<td>+6</td>
</tr>
<tr>
<td>Principles of Public Health Nursing</td>
<td>-10</td>
<td>+18</td>
<td>-10</td>
<td>+12</td>
<td>+2</td>
<td>+18</td>
<td>+4</td>
<td>+4</td>
<td>+18</td>
<td>-4</td>
<td>-4</td>
</tr>
<tr>
<td>Maternity and Infancy</td>
<td>-24</td>
<td>+16</td>
<td>-4</td>
<td>+10</td>
<td>+14</td>
<td>+4</td>
<td>+10</td>
<td>+24</td>
<td>+24</td>
<td>+10</td>
<td>-4</td>
</tr>
<tr>
<td>Child Health</td>
<td>-8</td>
<td>+24</td>
<td>-6</td>
<td>+16</td>
<td>-2</td>
<td>+30</td>
<td>+16</td>
<td>-6</td>
<td>+30</td>
<td>+24</td>
<td>-6</td>
</tr>
<tr>
<td>Non-communicable Disease</td>
<td>-2</td>
<td>+20</td>
<td>-8</td>
<td>+20</td>
<td>-4</td>
<td>+12</td>
<td>+12</td>
<td>+6</td>
<td>+26</td>
<td>-2</td>
<td>+6</td>
</tr>
<tr>
<td>Communicable Disease</td>
<td>-12</td>
<td>+8</td>
<td>-6</td>
<td>0</td>
<td>-4</td>
<td>0</td>
<td>+12</td>
<td>+12</td>
<td>+24</td>
<td>+12</td>
<td>+12</td>
</tr>
<tr>
<td>Venereal Disease</td>
<td>-18</td>
<td>+6</td>
<td>-4</td>
<td>-18</td>
<td>-6</td>
<td>+10</td>
<td>+4</td>
<td>+10</td>
<td>+4</td>
<td>-4</td>
<td>+4</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>+12</td>
<td>+6</td>
<td>-28</td>
<td>+20</td>
<td>+12</td>
<td>+6</td>
<td>-8</td>
<td>-2</td>
<td>+6</td>
<td>-36</td>
<td>-8</td>
</tr>
<tr>
<td>First Aid</td>
<td>-26</td>
<td>+10</td>
<td>+4</td>
<td>+18</td>
<td>+4</td>
<td>+12</td>
<td>-4</td>
<td>+4</td>
<td>+10</td>
<td>-4</td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td>-28</td>
<td>-14</td>
<td>0</td>
<td>0</td>
<td>+6</td>
<td>0</td>
<td>-14</td>
<td>+28</td>
<td>+28</td>
<td>-8</td>
<td>+14</td>
</tr>
<tr>
<td>Mental Health</td>
<td>-4</td>
<td>+10</td>
<td>-4</td>
<td>+10</td>
<td>+10</td>
<td>-3</td>
<td>+16</td>
<td>+20</td>
<td>+20</td>
<td>+16</td>
<td>+16</td>
</tr>
<tr>
<td>Health Education</td>
<td>-2</td>
<td>+12</td>
<td>-6</td>
<td>+18</td>
<td>+6</td>
<td>+12</td>
<td>+18</td>
<td>+18</td>
<td>+24</td>
<td>+12</td>
<td>+6</td>
</tr>
<tr>
<td>Background of Nursing</td>
<td>-4</td>
<td>+8</td>
<td>-4</td>
<td>-14</td>
<td>+2</td>
<td>+2</td>
<td>+2</td>
<td>+14</td>
<td>+30</td>
<td>-4</td>
<td>+8</td>
</tr>
</tbody>
</table>
### TABLE 3 - Continued
APHA Student PHN Test Scores by Subject Matter Areas Rated Average, Below and Above

<table>
<thead>
<tr>
<th>GROUP M - Continued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
</tr>
<tr>
<td>Total Score</td>
</tr>
<tr>
<td>Principles of Public Health Nursing</td>
</tr>
<tr>
<td>Maternity and Infancy</td>
</tr>
<tr>
<td>Child Health</td>
</tr>
<tr>
<td>Non-communicable Disease</td>
</tr>
<tr>
<td>Communicable Disease</td>
</tr>
<tr>
<td>Venereal Disease</td>
</tr>
<tr>
<td>Tuberculosis</td>
</tr>
<tr>
<td>First Aid</td>
</tr>
<tr>
<td>Nutrition</td>
</tr>
<tr>
<td>Mental Health</td>
</tr>
<tr>
<td>Health Education</td>
</tr>
<tr>
<td>Background of Nursing</td>
</tr>
<tr>
<td>Student</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>Total Score</td>
</tr>
<tr>
<td>Principles of Public Health Nursing</td>
</tr>
<tr>
<td>Maternity and Infancy</td>
</tr>
<tr>
<td>Child Health</td>
</tr>
<tr>
<td>Non-communicable Disease</td>
</tr>
<tr>
<td>Communicable Disease</td>
</tr>
<tr>
<td>Venereal Disease</td>
</tr>
<tr>
<td>Tuberculosis</td>
</tr>
<tr>
<td>First Aid</td>
</tr>
<tr>
<td>Nutrition</td>
</tr>
<tr>
<td>Mental Health</td>
</tr>
<tr>
<td>Health Education</td>
</tr>
<tr>
<td>Background of Nursing</td>
</tr>
</tbody>
</table>