EVALUATIVE RESEARCH IN NURSING EDUCATION

A Study of the Nursing Program at Ryerson Polytechnical Institute Toronto

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ROM THE TIME of the Weir Report in 19321, the idea of nursing programs at the diploma level organized within educational institutions began to take shape. During the Hall Commission inquiry into health services in Canada, many nursing groups strongly recommended that a move be made in this direction. The Registered Nurses Association of Ontario (RNAO) believed that such a program should be established on an experimental basis and that a formal assessment be required within a five-year period. In the early Sixties, the only possible location for a nursing program in a post-secondary institution in Ontario was at Ryerson. At this time, a study was carried out by Dorothy Rowles under the auspices of the RNAO to assess the feasibility of sponsoring a program at the Institute. Miss Rowles' report favored the step and recommended strongly that the nursing program be operated as much as possible within the existing policies and procedures of Ryerson². The first students were admitted to the course in September, 1964.

During this period the RNAO made plans to evaluate the nursing program. Through the evaluation, the RNAO sought answers to two questions:

- 1. What type of nurse does the program produce?
- 2. Is this method a practical way to prepare nurses?

Discussion concerning the method of evaluation began in 1965 and the present investigator was approached in 1966. Once the general plan for the evaluative research had been approved, we, the two research workers on the project, Mrs. Marie Reidy and myself, devoted the 1967-68 period to exploratory and preparatory work.

A number of discussions were held to determine the specific questions the RNAO was asking of the nursing program at Ryerson and the kind of information which they believed would be of assistance. Later, similar sessions were planned with other interested groups, i.e. nursing organizations, university schools, government committees, etc. During the same period we:

- 1. interviewed nursing students, faculty, and persons in administrative positions at Ryerson, and talked with hospital personnel who were involved with the Ryerson program and/or its students and faculty.
- 2. observed students and teachers in the different clinical fields as well as in nursing conferences.

As the research plan has taken shape discussions have been held periodically with various consultants in sociology, in education and in nursing.

On the basis of our exploratory work and the methods and findings of other research studies pertinent to evaluation and education, we began to devise instruments for gathering quantitative material relative to the questions posed. We are presently collecting data and expect to reach the stage of analysis toward the end of the year. Further analysis and the development of the report will occupy 1970-71.

EVALUATIVE RESEARCH

Studies of educational institutions and their programs vary in approach. On the one hand, one may analyse the formal philosophy, curriculum, administration, etc. as has been done in many studies in nursing education. On the other, one may attempt a systematic explication of the dynamic reality of a particular situation or program as opposed to that which is verbalized. The latter view is well demonstrated in the Sanford studies of higher education in the United States.³ Here the researchers looked at individuals and groups in-

volved in learning, in teaching, in administration, etc. They studied the dynamics of these processes to identify common patterns, relational variables, and the consequences for individual and groups in terms of development and learning.

Evaluative research represents an attempt to utilize the scientific method for the purpose of assessing the worthwhileness of an activity in reaching particular objectives. Furthermore, according to Suchman, such research is concerned with determining whether the goals themselves are valid.⁴ In the present study, neither the RNAO nor the nursing department at Ryerson have developed a set of highly formalized goals or objectives to be achieved. Rather, the course is directed toward certain general aims relating to the nurse who has a broader education; a sound basis in the sciences including behavioral sciences; a thoughtful and analytical approach to the nursing of patients; an independent, questioning, and confident outlook on nursing care and on health services in general, etc.

In the present study, we are gathering data related to these types of goals and accumulating information on the nature of nursing learned and performed later in the work situation. The purpose of this research is not to show that nursing programs are or are not feasible or to be valued in educational institutions. The location of programs for the preparation of the diploma nurse in educational institutions has long been accepted as a goal of organized nursing. Undoubtedly, it is the consensus of our society that preparation of persons in any type of complex skill involving a basis in both science and the humanities should be placed within the system of general education. For this reason, the approach to the present research project has been to assume that nurses can be prepared in educational institutions. Furthermore, it assumes that a variety of happenings occur either to increase the effectiveness of the educational process or to impede it and to place barriers in the way. With this point in mind the study has aimed to examine the type of nurse which is produced through the Ryerson Program and to identify some of the conditions responsible, i.e. factors influencing the nursing program and students learning to nurse. Secondly, the study has been designed to explore factors related to the practicality of this method of preparing nurses. Here problems which arise to threaten practicality will be examined.

Research findings arising out of the present project should apprise us of Ryerson achievement with respect to its overall goals; however, the extent to which the goals themselves may be deemed valid rests to a great extent on the RNAO's assessment of the findings, including the performance records of Ryerson graduates.

From our viewpoint, in studying a new program for the preparation of nurses, it seems reasonable to focus less on the formal aspects of curriculum and teaching and more on how students learn to nurse and how the nursing department operates, given a different setting, i.e. an educational institution. Briefly, the objects of this research are:

- 1. To determine the factors in the new situation which appear to influence students as they learn to nurse, and
- 2. To identify the consequences for the students with respect to what they learn and the type of nurse they become, and
- 3. To describe and assess the major factors in the situation in terms of their support for or their interference with the operation of the nursing education program, and
- 4. To study the performance of Ryerson graduates and how they "fit" into the work world.

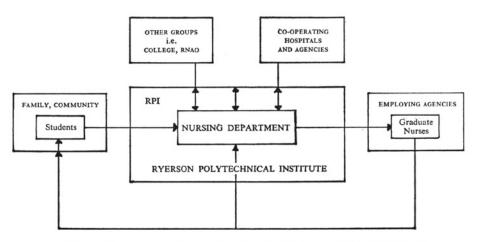
DESIGN

Suchman decries the failure of most evaluative research for not attempting to analyze the source of difficulties and for not setting forth guiding principles or procedures to help lessen if not overcome some of the problems.⁴ The present study aims to achieve these ends, albeit in a moderate fashion.

To permit a flexible approach to an exceedingly complex situation, a general systems orientation has been utilized in the research design. To quote from Bertalanffy:

Systems of course have been studied for centuries, but something new has been added... The tendency to study systems as an entity rather than as a conglomeration of parts is consistent with the tendency in contemporary science no longer to isolate phenomena in narrowly confined contexts, but rather to open interactions for examination and to examine larger and larger slices of nature.

We are looking at Ryerson as a large system incorporating a number of subsystems, i.e. the nursing department and the students learning to nurse. The present research views the subsystem of the student as the particular unit of study and conceptualizes the elements of the system and the major reciprocal relations as follows:



The systems approach provides for observation of the students as they move into, through, and out of the system. It enables one to identify what effects the output of the system (the graduates) have on future intakes (students recruited into the program), either directly or through the various groups which impinge on and influence the unit of study. Other groups, i.e. faculty, administration, other students, hospitals and agencies who cooperate in the provision of clinical experience, organizations and associations such as the RNAO and the College, are considered as they influence the primary unit of study in the larger system, i.e. students learning to nurse. These influences are assessed with respect to the support and positive value they appear to bring to the nursing program at Ryerson or, on the other hand, to the problems which they present and how these seem to be managed within the short time span of this study. In other words, the plan involves looking at the units of the system to identify how they interact with each other in terms of influence and "fit". How does one part influence another and to what extent does one part fit with another? Fit may be defined as the extent to which two or more parts are similar or consistent with each other on some particular dimension. Basically the model provides direction for the crucial types of data required:

- 1. The characteristics of students who enrol in the Ryerson nursing program.
- 2. The nature of the influences on these students as they learn to nurse, i.e. teachers of nursing and other faculty at Ryerson, the courses in the curriculum, other students, cost, living arrangements, personnel in cooperating agencies particularly nursing service, etc.

- 3. The characteristics of the Ryerson graduate and her performance and "fit" in the work world.
- 4. The feed back over time from employers and professional bodies (nursing) to the community and to Ryerson and its nursing department.

(A complete follow-up of this nature would take more time than allowed for this study. However, initial responses of graduates and of their employers may be assumed to portend at least the immediate future. In addition, the mechanics for continued study will be available for the RNAO to collect data in subsequent years.)

5. The organizational and administrative relations which exist between nursing and other levels of the hierarchy.

To augment the power of the study comparable data is being collected from three other diploma schools of nursing — one independent and two large hospital schools. Evidence gathered across institutions will permit a degree of generalization which is not possible in the study of one institution.

COLLECTION OF DATA

On the basis of the preliminary work and study the general research questions were broken down into more specific questions. Some of the questions are as follows:

1. Who are the students who are recruited into the Ryerson program? What are the characteristics, motivations, etc. of these students?

What factors in their several environments influence the nursing students in the Ryerson program, i.e. affect their learning? What values and characteristics as nurses do they espouse throughout their program?

What do students do in the program? How and where do they spend their time? What changes in general outlook occur in students? Where do they seek employment? What are their work and career patterns? What is their work performance and how do they get along? What nursing values do they and others hold in the work situation?

- 2. What are the characteristics of the faculty who come to Ryerson program to teach nursing? Who are they and what is their preparation? What type of nurse are they trying to prepare? How do they teach nursing? What are their career plans?
- 3. Where do the Ryerson students obtain their clinical experience? What are the values and attitudes re nursing and nursing education

held by the nursing service staff? What problems do they and the Ryerson faculty encounter in the Ryerson program? How are these problems managed?

- 4. Some attack has been levelled at the new programs in nursing education regarding whether or not students can "learn to take responsibility". As this concern was raised a number of times in the initial discussions, the question arises: How do faculty and how do nursing service personnel teach students to take responsibility and what sort of "responsibility behavior" do the Ryerson graduates exhibit in the work situation?
- 5. What is the location of the nursing dept. in the administrative organization of Ryerson? Who makes what types of decisions with respect to the nursing dept., its program, faculty and students? What are the lines of communication? What problems are foreseen and/or occur and how are these managed? What types of assistance, consultation, etc. are available to the nursing dept.?

What is the relation of the nursing department to other faculties and with intraorganizational associations at the student, faculty, administrative, and advisory levels?

- 6. To what extend does the nursing program appear to fit into an educational institution? What influences appear to derive from the technical focus of the organizational goal?
- 7. What are the costs of the nursing program compared with other programs at Ryerson? What are the costs to the students?

Procedures for the collection of data include observation, individual and group interviews, presentations of ideas or hearings related to particular topics, and printed materials and records. In addition, some critical questions have been translated into behavioral operations and instruments developed to measure the qualitative aspects of these dimensions. For this purpose, eight procedures have been developed or adapted to obtain a body of objective data which can be quantified. These eight instruments constitute the major data-collecting devices in the three schools of nursing studied to provide comparative focus.

As change in students throughout their program is an essential aspect of the study, we are measuring some responses and nursing behaviors of the students at different periods of the program for the purpose of establishing anchor points of known information. We shall then be in a position to assess change from one anchor point to another.

A general proposal for the collection of information relevant to the evaluation of a nursing education program has been presented. The paper emphasizes that evaluation implies a research design to ensure validity of data. Implicit in the research design is an assumption basic to evaluation: The need to know a great deal about something before placing value on it. For this reason, the essence of the study seeks to describe in detail what is happening in this novel type of program in nursing education. Actually the major valuing problem lies with the nursing profession as it strives to find suitable criteria for evaluation. As we consider our new educational programs across the country and the graduates of these programs we become increasingly aware of the need for the profession to generate criteria relevant to these programs of the future. Certainly criteria appropriate for traditional programs cannot be resurrected to assume this vital function, nor can the philosophical basis of prevailing criteria be interpreted to encompass the requirements of our new goals and methods.

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