A Concept of Research in the University

Canadian Association of University Schools of Nursing

A profession seeks knowledge to rationalize its practice. The question at issue is how the profession rationalizes the search for knowledge.

Historically, in the rationalization of practice, nursing drew first on knowledge of the simple needs of persons for care in illness. Later, with the institutionalization of services, nursing responded to the dicta of the organization as the basis for practice. With the expansion of knowledge in the social sciences and the increasing demands for health care from the public, nursing began to draw upon the sciences to generate hypotheses for testing in the practice of nursing. Today we can detect a movement away from the application of knowledge from related fields to a search for knowledge arising out of the practice of nursing itself.

The process of building knowledge in a field has been well documented in the sciences; this is the path which nursing must now take. Our first task is to gather as much information as possible on the variety of human situations, and of the results which accrue. From examination and an analysis of these data a picture of nursing will emerge, the concepts of which will require exploration and refinement and eventually development through the study of their relationships into a network of ideas, the hypostasis of nursing. At this stage the process of testing and experimentation will lead to further clarification and eventually to bodies of knowledge, and possibly competing bodies, on which to build more effective and predictive practice.

Research into the knowledge of practice reflects a profession's ethical commitment and concern for the public welfare, in that the criteria for quality performance derive from the comparative benefits and positive consequences which accrue to the individual or community under varying conditions of professional practice.

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- 1. To permit the development of nursing practice and to clarify its contribution within the health services, two types of research are needed:
 - (a) The former objective implies the need for research oriented to the generation of knowledge which is pertinent to, and directs, the practice of nursing. Because such research requires field study, it is likely to be both extended in time and expensive and owing to its complexity the results may be suggestive rather than conclusive. For this type of research to flourish, criteria for funding need to be developed to permit and encourage these special characteristics.
 - (b) In addition, nursing needs to participate fully in collaboration with persons in other health sciences to describe, demonstrate, and evaluate a variety of models or structures designed to permit a more efficient and effective health care delivery system.

The initiation and development of both these types of research are dependent upon financial support during the initial phase when nursing is studied and examined to evolve a research design and when health service models are conceived and elaborated within a research framework.

2. Research in nursing will develop increased sophistication only if more nurses are prepared at the master's and doctoral levels. The attainment of this goal is dependent upon the development of a pool of potential candidates, in particular from basic baccalaureate programs.

This brief is respectfully submitted to the Commission on behalf of the 22 institutional members of the Canadian Association of University Schools of Nursing. It outlines briefly certain premises concerning university nursing education and research, identifies the current status with regard to the development of nursing research in universities, and sets forth specific recommendations.

Premises Regarding University Nursing Education and Research

Nursing is an integral part of the health professions within the university and within the system of health care delivery. The profession of nursing has an obligation to contribute effectively to research legitimate to its own and related disciplines and to research designed to improve the delivery of health care.

A faculty of nursing can best achieve its three primary objectives of education, research, and service in close collaboration with other health professionals within a health sciences division of a university. Such collaboration is enhanced by selected shared educational, research, and service endeavours.

Nursing functions within a human framework, comprising a complex framework of diverse variables. It has a particular role in the provision of health care which is distinct from, but closely interlocked with, that of other health professions. It is not possible, therefore, for nursing to adopt unmodified theory from other disciplines, to strictly follow many methodological tenets of these disciplines, nor to rely solely on experiential data, all of which have been used at times to achieve quick and simple, yet often ineffective, answers to nursing problems. Nursing theory must both arise from nursing practice and direct its development. It must have a firm base in principles drawn from the physical, biological, social, and behavioural sciences. Theory building requires sound descriptive research to yield fruitful hypotheses for subsequent testing through experimental designs. Identification of variables must also result from astute observation and assessment of practice. Methodological studies for the development of valid and reliable instruments are basic. Research in the delivery of health service requires freedom in experimentation with creative developmental projects for which precision in evaluation, particularly of impact, has yet to evolve. Those engaged in university research, education, and practice must all contribute to the testing of existing principles and theory, the acquisition of knowledge, and the continuous enrichment of practice through application of this knowledge. This makes mandatory the development of highly trained nurse clinician researchers.

The processes of nursing, research, and education are closely linked. The ultimate focus to which student learning is directed comprises a variety of essential components. Foremost is the interaction between the nurse and the individual, family, or community. Consideration of alternate courses of appropriate action by nurse and client alike is the outcome of scientific assessment of the client's position on the continuum of health and illness in conjunction with the factors determining that position. These bases of choice determine the design for health promotion, as well as for preventive, curative, or rehabilitative care and assessment of its effectiveness. Of necessity, the teacher in nursing must possess the investigative and decision-making skills inherent in the process of nursing and must be competent to assist students in the development of such skills. It is reasonable to expect the undergraduate student in nursing to develop an attitude of inquiry and

to become an intelligent research consumer and collaborator. This requires nursing education which incorporates the scientific approach and a broad basis in the physical, biological, social, and behavioural sciences. In graduate education, the student requires greater preparation for and more extensive experience in research, further study in general education, and concentration in nursing theory and practice. From graduate programs must come our competent nurse researchers, university teachers, and key personnel in nursing service.

Development of Nursing Research in Universities

Tribute must be paid to those Canadian university schools of nursing which have pioneered graduate education in nursing and fostered research through their programs. Many projects undertaken by graduate students have provided valuable beginning experience in research; some have made a recognized contribution to nursing practice, education, and administration. A few nurse researchers on some university faculties have been engaged in noteworthy projects, primarily in the field of education or the delivery of health services. There is a commendable increasing emphasis in undergraduate programs on formal preparation in the rudiments of research and statistics, the encouragement of a spirit of inquiry, the sharpening of assessment skills, and the provision of a broad rigorous program of study as a firm foundation for graduate education. A climate conducive to research, both in the university and in the clinical field, is crucial. It is encouraging to note that such a climate is developing in some centres.

Nevertheless, the current situation in Canadian university schools of nursing leaves much to be desired if any real progress is to be made in nursing research. There are approximately 25 nurses in Canada with earned doctorates, 500 with master's degrees. There is great variation in the adequacy of the research component of master's programs which faculty have experienced. There is the emerging occasional planned program of ongoing education in research for faculty. On some campuses short intensive courses in research, statistics, and computer science are offered which are useful to the few faculty finding time to take advantage of them. The ready accessibility and sharing of human and material resources for the encouragement and facilitation of nursing research varies with individual universities, as does dissemination of information on research funding and findings.

With few exceptions, those nurses on university faculties holding doctoral or master's degrees are almost exclusively engaged in administration and/or teaching. The nature of nursing education demands a

small faculty/student ratio, yet budgets in nursing faculties rarely make adequate provision for this, nor do they extend to meeting the heavy committee and administrative demands crucial to ongoing curriculum development and implementation. The faculty member who is a nascent or experienced researcher often faces a schedule which precludes development of research designs, let alone their implementation. In addition, unallocated funds for research in nursing have rarely been available. As a result, faculty have found it impossible to develop a well-defined extensive and long-term program of research, segments of which could offer excellent experience to graduate students. Graduate student projects tend, therefore, to be isolated beginning investigations in circumscribed areas, using small samples and leading to little extension or replication. The picture has been further confounded by the few channels available in Canada for publication of nursing research reports.

Faculties of nursing, either individually or collectively, can partially rectify some of the aforementioned difficulties. Greater interdisciplinary-colleague encouragement and co-operation is needed in other instances. For three key problems, new measures and extended support are required. These problems are: insufficient numbers of well-qualified nurse researchers to conduct research and supervise graduate students; insufficient time for them to exercise their expertise; insufficient funds and accessibility to supporting services and personnel to facilitate their undertakings. This situation prompts the following recommendations.

Recommendations

- That substantial support be given to promote improved initial and ongoing education of nurse researchers, field investigators, and research assistants.
- 2. That there be budgetary provision for faculties of nursing to contribute effectively to the accepted teaching, research, and service objectives of the health sciences divisions of the university.
- 3. That unallocated funds be made available to deans and directors of nursing in universities where there are competent nurse researchers, adequate supporting services, and an appropriate milieu for research, such funds to be used for proposal development, pilot testing, and maintenance of supporting staffs between grants.
- That granting agencies apportion reasonable amounts of money for annual allocation to nursing research in recognition of its current stage of development.