Federal Support for Nursing Education to Improve Quality of Practice

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FOR MORE THAN 40 YEARS, a Federal focus for nursing in the Public Health Service has been responsive to the need for increasing the number of nurses and improving the quality of practice toward the goal of better health care of the American people. As presently constituted, the Division of Nursing was formed in 1960, combining two existing Divisions—Public Health Nursing and Nursing Resources. The Division of Public Health Nursing had been established during the 1930s to work with States to extend and improve health services. The Division of Nursing Resources was an extension of the Cadet Nurse Corps Program, which supported the recruitment and training of nurses during World War II. Today, the Division of Nursing is a part of the Bureau of Health Manpower, a component of the Health Resources Administration, Public Health Service, in the Department of Health, Education, and Welfare.

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The experience during the war years in providing consultation to schools of nursing and to hospitals and health agencies in the use of nursing personnel created an awareness of the critical need for well-prepared faculty and administrators of nursing service. In response to this need, legislation authorizing the Professional Nurse Traineeship Program was enacted in 1956 to prepare registered nurses as teachers, supervisors, and administrators of nursing service. In the 1950s, research and research training programs were established to extend the scientific base of nursing practice. As the shortage of well-prepared nurses became increasingly evident, a Consultant Group on Nursing was appointed by the Surgeon General in the spring of 1961 to advise him on nursing needs and to identify the appropriate Federal role in assuring that the nursing needs of the country would be met.

In 1963 the Consultant Group published its final report, "Toward Quality in Nursing." Its recommendations constituted a broad-based program of Federal aid to improve the quality of nursing education programs and to increase the number of nurses in practice (*1*).

These recommendations became the basis of the Nurse Training Act of 1964.

Nursing Education

With funds authorized under this act and subsequent extensions and modifications, significant achievements have been made (*2*). Funds for construction enabled schools to expand and renovate facilities to reflect changes in nursing education. Basic support grants for all types of nursing education programs enabled schools to employ additional faculty and stimulated increases in enrollments. Support for special project grants enabled schools to undertake a variety of projects to strengthen curriculums in initial programs; support programs of continuing education; introduce educational techniques, such as TV programs, videotapes, slides, films, and filmstrips for multi-phased self instruction; and broaden the base of recruitment into nursing. Loans, scholarships, and traineeships have provided the necessary student assistance.

From 1964 to 1978, slightly more than $1 billion in Federal funds were expended for nursing education. This support has contributed significantly to increasing the number of nurses and improving the quality of nursing education. The findings of recent studies initiated by the Division of Nursing suggest that, in the absence of any changes in the health care delivery system, supply and requirements for nurses will be in fairly good balance. However, the growth of health maintenance organizations, the movement toward role reformulation, and the public commitment to assuring access to the health care delivery system are indications that changes will occur in the years ahead. These changes will require more nurses and, more importantly, nurses with different competencies (*3*).

The success of Federal assistance in improving the quality of nurse training is evidenced by the marked increase in the number of schools that have achieved national professional program accreditation. From 1964 to 1976, associate degree programs that were so accredited increased from 4 to 46 percent, and baccalaureate programs increased from 71 to 80 percent. While the number of diploma programs declined markedly in this period, 90 percent of those that continue are accredited, as compared with 68 percent earlier (*4*).

It is significant that nursing school administrators have become aware that educational programs and the composition of the nursing student body must be more responsive to and representative of the total population to be served. This trend, too, was largely stimulated and fostered by nurse training funds.

If the advances made in preparing well-qualified nurses are to be sustained into the 1980s and beyond, professional and public attention must focus not only on numbers but on the competencies of the nursing work force. Emphasis on prevention of illness, on helping individuals and families to be full partners in maintaining their health, and on understanding the effects of the environment and of stress (*5*) call for special skills. In this plan, nursing has a decisive role. During the past several years the Division of Nursing has pioneered, through its intramural and extramural programs, in applying epidemiologic methods for the identification of high-risk individuals and communities and the development of appropriate nursing interventions.

In a recent project supported by the Division of Nursing, community health nursing students learned from a community's residents that the most serious problems in that area were an excessive number of rats, poor drainage, delinquency, alcoholism, and inadequate public transportation, not to mention the indifference of public officials. These were the problems the community wanted solved. Traditional public health nursing education would not have prepared nurses to adequately handle these situations, but the education these students received had prepared them to work with various citizen groups in solving community projects that were germane to the community and directly influenced the community's health.

The students' goal was to help the community to help itself, and attempts were made from the beginning of the project to build in some degree of continuity, so that efforts would not cease when the students left the community. Students were encouraged to prepare some group or groups, with sufficient energy and ability, to continue their problem-solving efforts, since the student year was barely sufficient to build the groundwork for such community undertakings. In instances where graduates had remained for some time, there is evidence that the community increased its competence in looking at its problems, in bringing its own and other resources to bear on these problems, and in capitalizing on its own strengths (*6*).

Nursing Practice

Incorporating findings from projects such as the one just described into the fabric of initial and continuing education is the key to keeping nursing practice in tune with changes in health care delivery. For example, through a research project in child health assessment, tools were devised which enable nurses to assess early beginnings of dysfunction and characteristics predictive of future developmental problems.

Previous efforts at documenting infant risk factors have tended to focus on a few variables, usually demographic, biological, or pathological. But little was known about the effect of social, environmental, and

behavioral factors. A screening format was developed which included, besides the physical and developmental factors typically observed and assessed, environmental factors such as the parents' perception of their child, the interaction between parents and child, the amount of stimulation available to the child, and the amount of stress in the family. The ultimate goal of the project was to develop a screening process to identify children in adverse situations so that preventive services could be offered when remediation would promote optimal health (*7*).

As the child health assessment research neared its termination, both the Division of Nursing and the research team were eager to quickly share their promising findings with practitioners in the field. Coincidentally, the National Aeronautics and Space Administration was, at that time, exploring new uses for space technology, and the Department of Health, Education, and Welfare was seeking educational experiments. It was appropriate, therefore, to arrange for the telecast via satellite of a series of programs, presented as a course in continuing education, to faculty nurses, public health nurses, and hospital nurses in the maternal-child health field at various sites in the country. Satellite communication demonstrates the potential for prompt interaction between expert researchers and health practitioners for putting research findings into practice as quickly as possible. Nurse faculty so prepared can incorporate this body of knowledge into programs preparing nurses for practice in both academic and clinical settings, and nurse clinicians can use these research findings in practice to improve the delivery of health care services.

Interest in preparing nurses to be primary care practitioners has been stimulated in recent years by public awareness of the need to improve access to health care services, particularly in rural and inner-city medically underserved areas. Largely in response to this need, the Federal Government undertook to support nurse practitioner training programs.

Expansion of the nurse's role is not a new phenomenon. Nursing historically has been responsive to changing societal needs, as well as to advances in biomedical and behavioral sciences. Certain functions that were once the exclusive responsibility of the physician have been incorporated into nursing practice. A classic example is the practice of nurse-midwifery in which nurses have extended the scope of their responsibility to provide a full range of services to patients during the normal pregnancy cycle and at the same time to carry out medically delegated functions under the supervision of an obstetrician or another physician.

One of the earliest nurse practitioner education programs was established at the University of Colorado in 1965. Since that time, the number of nurse practitioner training programs and the areas of practice have increased sharply. A recent study, supported by the Division of Nursing at the State University of New York at Buffalo, provided data for a comparison of the number of various nurse practitioner programs in the United States in 1974 and 1977. This comparison is shown in the table.

The services provided by nurse practitioners are not intended to supplant those provided by physicians, but rather to supplement them. The focus of their practice is nursing, and the ability to perform certain medically delegated functions in the provision of primary care adds a new dimension to this practice. Nurse practitioners function with the credential of individual licensure as registered nurses, fully accountable for their own practice. Through advanced preparation in nursing as well as the basic and behavioral sciences, their ability to make discriminating nursing judgments is refined; their skills in assessing health status are increased; and their faculties for preventing illness, maintaining health, and managing nursing care are sharpened. For patients with stabilized chronic illness, the nurse is the principal source of support for helping them cope with the adjustments imposed by physical and mental dysfunction.

Recent revisions of many State nurse practice acts have lessened restrictions on the functions registered nurses can perform. During the past decade, more than half of the States revised their nurse practice acts to facilitate role expansion for registered nurses. Additional States expanded their definitions of professional nursing to include more autonomous functions (*8*).

At issue now is authorization for reimbursement of

Primary care specialty areas of nurse practitioner education programs (university or college based) as of January 1, 1974 and January 1, 1977 [1]

Specialty	Certificate programs		Master's programs		Total	
	1974	1977	1974	1977	1974	1977
Pediatric	33	33	8	10	41	43
Midwifery	4	7	6	7	10	14
Maternity	6	19	7	11	13	30
Family	15	34	12	23	27	57
Adult	13	27	8	19	21	46
Total	71	120	41	70	112	190

[1] This table includes only nurse practitioner programs in primary care fields.

SOURCES: Data for January 1, 1974, from: Sultz, H. A., Zielezny, M., and Kinyon, L.: Longitudinal study of nurse practitioners, phase I. DHEW Publication No. (HRA) 76-43, 1976, p. 21. Data for January 1, 1977, from: Sultz, H. A., Zielezny, M., and Kinyon, L.: Second longitudinal study of nurse practitioners. Contract No. 231-76-0044, Division of Nursing, unpublished.

services of nurse practitioners. Recent passage of the Rural Health Clinic Services Act, which authorizes reimbursement under Medicare and Medicaid in certain rural health clinics (*9*), is the first step in recognizing the need for reimbursement for nursing services.

Nursing Education Trends

These changes in the depth and scope of nursing practice call for a solid foundation in the physical and behavioral sciences upon which preparation for community as well as institutional practice can be built. This preparation is provided only in programs leading to a baccalaureate degree.

Despite the shift in nursing education toward academically based nursing programs, the supply of nurses for the next several decades will be mainly comprised of graduates of hospital-based and associate degree programs, both of which prepare graduates for institutional nursing service. Indications are that, if present nursing educational trends continue, the number of graduates from basic baccalaureate nursing programs will increase considerably over the next 13 years. However, by the 1988–89 academic year, they will still constitute less than half of the total number of new nursing graduates. The proportion of the nurse supply with at least a baccalaureate degree is estimated to be 33 percent for 1990; in 1977 it was 21 percent (unpublished data, Division of Nursing).

The disparity between the anticipated supply and requirements in terms of educational preparation was of concern to a Panel of Expert Consultants convened by the Western Interstate Commission for Higher Education in 1977 to derive projections for nursing requirements. This body, broadly representative of nursing education and practice and of health care administration, called for a sharp increase above 1976 levels in the number of nurses prepared at the baccalaureate level and a decrease in those prepared at the diploma and associate degree levels (*10*).

As shown in the chart, the projected requirements for nurses with at least the baccalaureate far surpass the Division of Nursing's estimate of the anticipated supply of these nurses, while requirements for nurses at the associate degree or diploma level are far below the current as well as the anticipated supply.

The Panel's recommendation echoed the emphasis placed on baccalaureate education for nurses by the Surgeon General's Consultant Group on Nursing nearly 20 years earlier. But it is important to remember that changes in educational systems take place over time and that the composition of the work force in the 1980s will reflect the composition of student enrollments in the 1960s.

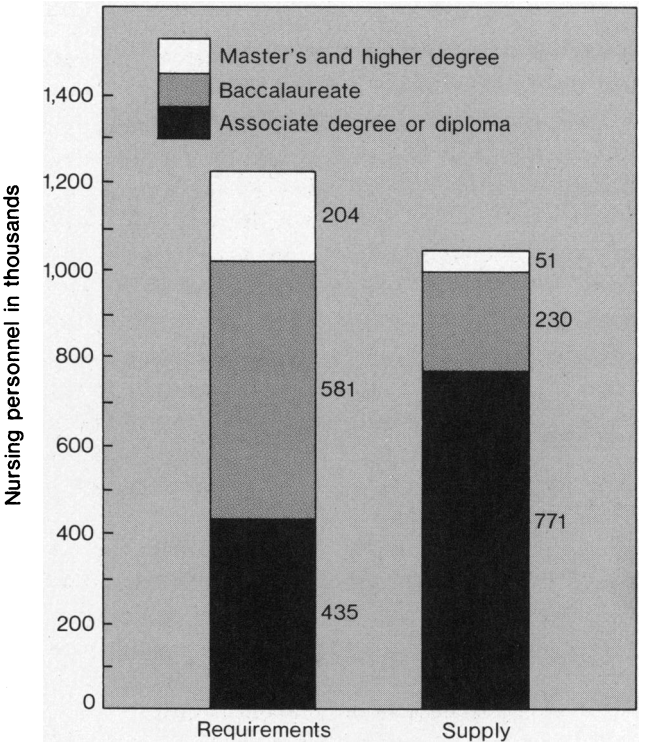
The most serious constraint in preparing enough nurses for new modes of practice is the chronic shortage of prepared faculty. The 1976 National League for Nursing study on faculty preparation, for example, found that 58 percent of the faculty in programs preparing registered nurses had master's degrees, the minimum acceptable qualification for teaching even in systems of secondary education. Fewer than 5 percent had a doctoral degree (*11*). It is anticipated that with the maintenance of present conditions, the supply of nurses with master's or doctoral degrees will constitute only 6 percent of the anticipated full-time equivalent supply by 1990 (unpublished data, 1977, Division of Nursing).

Nurses with advanced preparation and research skills are also needed to carry out studies and evaluations to develop a body of knowledge that will strengthen the basis of nursing practice. The 1977 Report of the National Academy of Science's Committee on a Study of National Needs for Biomedical and Behavioral Research Personnel included specific recommendations for the advanced training of nurses for nursing research (*12*).

Nursing Clinical Centers

Strengthening the link between education and practice has long been identified as a priority in nursing.

Full-time equivalent registered nurses, by educational preparation, 1982



SOURCES: Requirements were obtained from reference 10; supply estimates were prepared by the Division of Nursing, 1977.

As the trend in nursing education moves into the academic setting and the emphasis shifts from institutional to community based care, it becomes imperative to develop new methods of delivering nursing services. Specialized settings—nursing clinical centers—are needed where new roles can be demonstrated and new methods of nursing care can be developed and tested.

In nursing clinical centers, nursing care is the primary focus and their patients have the kinds of health problems that respond best to nursing interventions rather than to the interventions of other health professionals. Patients who must deal with the multiple problems related to coping with chronic illness and terminally ill patients whose needs relate to care rather than to cure respond well to care in the nursing clinical center where nontraditional, less formal relationships prevail among all the health professionals.

Nursing clinical centers allow the nurse to link education, practice, and research to patients' problems, contributing to improved nursing education and practice, and most important, to significant improvement in nursing care. In such settings, nursing faculty and staff can be role models for students while they incorporate skilled practice and research to increase the effectiveness of patient care. Students have the opportunity to observe faculty in the institution and the community and as nurse clinicians engaged in patient care and research. Nursing service as well as nursing education are involved in research development. Staff can demonstrate, for example, the differential patient outcomes that could be attributed to the amount and type of nursing care given.

Many health care settings already exist where the primary needs are for nursing care rather than cure. In rehabilitation centers, nursing homes, and home health agencies nurses are the principal providers of care. In hospices, nurses are the primary providers of care for terminally ill patients—giving comfort, counseling, and support to the patient and the family. At the other end of the life cycle, innovative childbirth centers are staffed by nurses and nurse-midwives who provide prenatal care, attend births in the home or in a family-oriented setting, and promptly bond the newborn to the parents.

Assistance from the Federal Government in the form of leadership and support in the establishment and operation of nursing clinical centers would continue the pattern of Federal initiative which has been so successful in the past.

Conclusions

Federal support does not address all the issues. There must be innovative approaches to basic and continuing nursing education so that new nurse graduates are prepared to function in a variety of settings, and active nurses can improve their skills so that they can assume increased responsibilities. Graduate programs must strengthen their curriculums and expand enrollments to meet the continuing need for nurse faculty, administrators, researchers, and clinicians. The number of nursing clinical centers for the demonstration of new modes of nursing practice must be increased.

If national goals are to be met, with emphasis on the promotion and maintenance of good health and the assurance of equal access to quality health care for all Americans, nurses will have an increasingly important function. We must be sure they are prepared to make that contribution.

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