# The unintended consequences of a male professional ideology for the development of nursing education

At the turn of this century, early leaders of nursing education in the United States looked at the success of physicians in creating medicine's acceptance as a "profession." Trying to emulate this model, female nurses embraced a culturally and socially defined medical, male-oriented professional ideology that equated being professional with being scientific. In this article, an exploration of the unintended and unacknowledged consequences of the nurse leader's actions reveals how adherence to this professional ideology has divided nurses and confined its proponents to professionally limiting and self-defeating values.

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Re-vision—the act of looking back, of seeing with fresh eyes, of entering an old text from a new critical direction—is for women more than a chapter in cultural history: it is an act of survival. Until we can understand the assumptions in which we are drenched we cannot know ourselves.[1(p35)]

AT THE TURN of this century, early leaders of nursing in the United States looked at the success of physicians in creating medicine's acceptance as a "profession." These leaders worked hard to obtain legitimate professional status for nursing by following the physician education model outlined in the 1910 Flexner Report.[2] Trying to emulate this model, the female

*The author wishes to recognize the contributions of men, as well as women, as workers in nursing who generally remain invisible in its history. In addition, she acknowledges the leadership of contemporary men in nursing, particularly David Allen, from whom she learned to conduct emancipatory research that attends to the political, social, and cultural aspects of knowledge.*

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nurses embraced a culturally and socially defined medical, male-oriented professional ideology that equated being professional with being scientific.

The historic and current advocacy of this ideology by many of nursing's leaders has helped to generate some of the current ongoing tensions among women working as nurses. These tensions are often reflected in the contemporary debates found in the literature (eg, "What is nursing?" "What constitutes nursing's body of knowledge?" "Is nursing caring?" "What are the levels of differentiated practice?" "What are the appropriate analytical methods of nursing science?").

In this article, the movement of nursing education into academia will be explored in terms of how nursing leaders have adopted and adapted the male physician ideology and the impact this has had on the socially constructed reality of present-day nursing. The thesis will be advanced by an analysis of the development of the professional ideology, nursing's historic allegiance to the professional scientific ideology, and a discussion of the implications of that ideology on the current status of nursing.

Although all ideologies are socially constructed, the physician's professional ideology relied on practices designed to reproduce the male-dominant social and cultural order through the articulation of a belief system that had the appearance of being essential and natural, rather than being humanly and socially constructed. The patriarchal social orders, as Rich[1] pointed out, defined specific skills and needs of women and men as necessary and complementary to each other. The medical education reform created medicine as a profession almost exclusively for white, male, upper-class Americans. Concurrent with the reform, the new professional, the medical "expert," took over the practice of healing from the local community members or family members, usually women. A de-skilling of sorts took place, because the medical experts began to manage many human experiences as medical problems.[3] In so doing, educational reform was used to close the ranks of "professional healers" to blacks, women, and other health care caregivers.[4]

Reviewing the historic record of nurse leadership from a gender-specific perspective provides an opportunity to explore the unacknowledged and unintended consequences of the acceptance of a concept of profession that was constructed by white male elites based on an ideal of work derived from male experiences. On the other hand, there is no question that nursing, as it has developed in the United States,[5] has been the work of women. Indeed, the traditionally defined feminine characteristics of caring, nurturing, and interacting have long been associated with nursing. As Reverby[6] asserts, nursing began as a woman's duty, not her job. The cultural emphasis on the importance of the family, combined with the assumption that this role of caregiver to the sick is "woman's rightful place" in society, has had, and continues to have, a major impact on nursing as a sex-segregated profession.[7] This "re-vision" of a chapter in nursing's cultural history can lead to an awareness of the impact of the cultural, social, and political forces that have helped to shape nursing in certain ways. This new awareness can provide the bases for discussion by nurses of a new and different 21st century vision for nursing and education.

## THE ROOTS OF THE PROFESSIONAL IDEOLOGY

### Early American nursing and medicine

Although the very early history of schools of nursing in the United States is not always clear, records of physicians' schools that started to train nurses date back to about 1798. Women's organizations and women physicians were interested in training nurses for the care of women, particularly during the period of pregnancy and childbirth.[8] The first formal training schools for nurses, which followed the Nightingale model, were initiated in the United States in 1873 and excluded men, as well as black and married women.

However, the origins of the need for nurses to take care of the injured and infirm arose with war and the resultant need for hospitals. During the American Civil War, nurses were needed to take care of wounded soldiers. At that time, men and women from all levels of society, representing a myriad of intelligence, diplomacy, daring, and experience, assisted with the care of the sick and the wounded.[9] At about the same time in England, Florence Nightingale established the first formal training school for nurses at St. Thomas' Hospital, London. Not only was Nightingale successful in developing the first formal school for nurses in 1860, but she was also effective in creating and limiting nursing to the trained female nurse.[10]

Hospitals, established in place of almshouses, were designed to care for a deserving, industrious population that needed help—only while sick—and established the need for nurses.[11] In 1869, the first writings expressing a need for nurses appeared in reports from the American Medical Association (AMA).[12] The AMA, taking into consideration "the promotion of health and comfort, the saving of life and money, and the improvement of the moral and religious condition of the sick,"[12(p172)] respectfully urged the medical profession and the country at large to employ only well-trained nurses both in public institutions and private families. Although religion was an important attribute of the trained nurse, and the AMA suggested that combining religious exercises with nursing would be eminently conducive to the welfare of the sick in all public institutions, the primary attribute was female gender.[13] While the immediate supervision of the nurses was to be under the direction of a Deaconess or lady superintendent, the business of instruction in the art and science of nursing, according to the AMA, should be under "the county medical societies in every State."[12(p172)]

About the same time, those first American nursing schools following the Nightingale model found themselves without the endowed support that had allowed Nightingale to establish her School of Nursing independently, both administratively and financially, from the hospital. Subsequently, the American nursing schools were soon absorbed into their parent hospitals. Ashley's[11] position, in her revisionist study of American hospitals and nursing, illustrated the fact that when the male hospital administrators, often physicians, saw that nurses in the hospital meant decreasing mortality and increasing income, the administrators ensured their positions of power by easing women out of any positions of influence within the hospitals. The administrators used the argument that it was not the proper function of

***The effect and social force of the medical profession on the development of nursing cannot be ignored.***

women to be in positions of authority. Therefore, the men took the leadership and management authority in the hospitals and left the work to women.

The effect and social force of the medical profession on the development of nursing cannot be ignored. During the 19th century when medicine began its rise to power, society's values included independence, competition, and free enterprise.[8] During this period, the apprenticeship model of education (ie, learning by doing) was the norm for physicians and nurses. Although physicians followed the apprenticeship model of education by associating with a practicing physician, nursing students learned primarily from each other. Christy[14] described this as the blind leading the blind, rather than a "master" and a teacher leading a student.

Ashley[11] characterized the situation as one in which the hospital was the master and the student nurse, who gave free labor in return for informal training, was the apprentice. This form of student labor became accepted as the most popular and least expensive means of providing nursing care. Because women learned to become nurses by doing the work of nursing, the histories of nursing education and nursing practice are intertwined.

### Medical reform

A radical departure from this old regime of apprenticeship found in medical education took place when the Johns Hopkins University opened its medical school in 1893, requiring a 4-year program in academic and clinical education, as well as the unprecedented mandate that all entering students have college degrees.[3] Johns Hopkins presented a view of medical education as graduate education rooted in basic science and hospital medicine. Scientific research and clinical instruction moved to center stage, and scientific medicine was born.[15,16]

This was the context of the 1910 Flexner Report and the subsequent professionalization of medicine. The impetus for "reform" began with members of the AMA who came into power in a reorganization of the association in 1901.[3] The Flexner Report[17] was an 18-month study of medical education in America that used the scientific medical model of Johns Hopkins as the benchmark for all medical education. It was conducted by Abraham Flexner, an educator and graduate of Johns Hopkins University, and funded by the Carnegie Foundation for the Advancement of Teaching.

As a result of Flexner's study, many schools closed, specialization began to occur, and Flexner's prescription for fewer and better educated doctors became a reality. The medical school became the sole center for the production of physicians, and apprenticeship programs passed into history. The goal of this educational reform was to standardize the production of physicians according to the new scientific norms.[16]

## ADOPTION OF A PROFESSIONAL IDEOLOGY FOR NURSING

The medical "reform" laid the foundation for a professional ideology that nursing

leaders attempted to imitate in pursuing their goal to advance nursing. The male concept of a professional, which was the socially prevailing and successful model, was based on such characteristics as service orientation, higher education, a body of knowledge, and autonomy. Thus, it had appeal for nursing leaders. Their intent was to upgrade the profession, not to harm nurses or nursing, just as the overall ideal in current nursing is to improve patient care.[18] Ideologies not only enable but also constrain; they become an assertion of values and deny being a social practice.[19] Although the leader's proposals seemed reasonable and were well intended, nurses did not always recognize that other health professionals did not share their ideals.[13] A re-vision of this history of strategies by nurse leaders reveals the beginning of a veiled history of the reality of nursing in which politics and social forces played a role in the emerging disparity between nursing leaders and ordinary nurses.

In the establishment of the early Nightingale nursing schools, the leaders accepted the assumptions and strategies of professionalization and used them to help defend trained nursing as paid work by distinguishing it from women's domestic duty. However, with the development of hospitals and the patriarchal constraints inherent in American culture, the division of labor within the medical care system was under medical control and clearly placed nurses as workers within the system. Although physicians were upper-class males, nurses in the medical care system were women and most often were from the working class. In a heavily classed society, these gender and class differences had tremendous implications for nursing. Melosh encapsulated the situation when she wrote that an occupation's status "depends as much on the social position of its workers as on the nature of the work itself: *who* does the work may be more important than *what* the worker does."[5(p9)]

## Changes in society

As the 19th century drew to a close, the Progressive Movement in American politics and thought emerged. The movement brought forth a militant and dedicated group of reformers who, in their genuine concern for all, developed political, social, and humanitarian objectives that governed their activities.[18] The Progressive Era had a great impact on education in the United States. As Kliebard[20] points out, 1890 marked the beginning of a 40-year period when the high school population doubled every decade; when American society was transformed from a predominantly rural country of small towns and villages to an urban, industrial nation; and when the Americanization of immigrants became a function of the schools. Professional education

> could be observed in all parts of the country, in particular at the great university centers of Stanford, Chicago, and Michigan, but no one institution symbolized it more dramatically than the new Teachers College at Columbia University.[18(p7)]

It was in this setting that two Johns Hopkins Hospital nurses, Isabel Hampton and M. Adelaide Nutting, became key figures in nursing education through their development of the Department of Nursing and Health at Teachers College.[18] Both nurses were part of the meeting of the influential superintendents of nursing schools held at the World's Fair in Chicago in 1893. Two separate organizations of nurses—the

Nurses Associated Alumnae and the other was the American Society of Superintendents of Training Schools for Nurses—were discussed and grew out of that meeting. In 1952, the Nurses Associated Alumnae became the American Nurses Association (ANA) and the Society became the National League for Nursing (NLN).

As in medical education, the lack of uniformity in the system of instruction in schools of nursing was a major concern.[21] Annual meetings of the Society for Superintendents continued with a focus on standardized curriculum development for schools of nursing. One of the leaders of the Society, Isabel Hampton Robb, pointed out that a woman might possess executive ability and have completed nursing training, but may still be at a disadvantage in a superintendent position because of lack of preparation for teaching.[22]

Members of the Society of Superintendents represented a very privileged group of women within American society at large; many had been teachers before entering nursing, most were unmarried, many were financially secure, and most had in some way been associated with the Johns Hopkins Training School. Conversely, nurses who trained at hospital schools came predominantly from middle or working class families, had a need to support themselves, and did so by providing nursing care. Nevertheless, by the turn of the century, a plan was in place to create a course of study at Teachers College for superintendents and teachers of nursing.

Thus, the foundation was established for sustaining a professional ideology based on advanced education that would remain at the core of future actions of nurse leaders as they strove to bring academic and professional status to nursing. By 1910, physicians had successfully used medical licensure to limit competing medical sects such as homeopathy, osteopathy, chiropractic, and nursing, as well as to advance their social and economic position.[23] According to Friedson,[15] it was this move toward licensure and the privilege of self-regulation and evaluation, more than any other factor, that distinguished the professions from the skilled trades.

Following in the footsteps of physicians, nurses fought to have their practices licensed. Nurse leaders hoped to obtain the same professional prestige for nursing that medicine had received. The 1900 census listed almost 12,000 graduate or trained nurses, compared with 109,000 untrained nurses and midwives.[24] With state licensure, nurses could distinguish between the trained and the untrained nurse and, more importantly, control the education and the practice of licensed nurses. The move toward nursing licensure was not without opposition from the ranks, but the leadership persevered. The legislation of licensure left the bulk of nursing education in hospitals and represented a compromise to the leadership, but by 1923, all states had Nurse Practice Acts governing the educational requirements and the scope of practice of licensed nurses.[23] Although the AMA, representing the majority of doctors, was strongly behind the licensing model for physicians, and indeed controlled the process, the Society of Superintendents and nurses in general were not united in efforts to gain nurse licensure.

As the 20th century dawned, it became known as the century of social consciousness. Child labor, the influx of immigrants, and the rise of industry and urban developments were all part of the scene.[9] Nurses

were beginning to turn their attention to the care of immigrant women, children, and the poor in the community. Settlement houses were established, including the famous Henry Street Settlement House in New York City under the leadership of a nurse, Lillian Wald.

With the establishment of the U.S. Children's Bureau in 1912, the welfare of all American children and child life became a matter of concern.[25] The passing of the Sheppard-Towner Act of 1921 provided federal grants-in-aid to states for services for the welfare and hygiene of mothers and children. Although the majority of trained nurses still remained as private duty nurses, public health nursing was being formed as hundreds of nurses were employed to make home visits and to supply health education and health screenings to mothers and infants.[26] Nurses were picking up the "gospel of public health" as physicians, under the rising banner of scientific medicine, provided the knowledge and authority in public health.

### Beginnings of university education

This movement in society provided a base from which nurse leaders could advocate a different sort of education for nurses. Nurses who had trained in hospitals had no experience in health screening and health education. Nutting seized the opportunity to seek university education for public health nurses. Gradually, The Department of Nursing Education at Teachers College became an independently endowed department with its own faculty.[18] Societal forces seemed to be assisting nursing as it managed to become secure in at least one institution of higher learning, the site of knowledge generation and science. However, as nurses became successful teachers and practitioners of public health, societal forces, led by physicians, eased nurses out of their positions of autonomous practice.[27]

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Other universities began to offer programs of study for nurses. With a Teachers College graduate at its head, in 1909, the University of Minnesota offered a nursing program. In reality, this program was still affiliated with a hospital and, although university courses were offered, a college degree was not earned. By 1916, nurses were able to enter some schools, including University of Minnesota, and receive a college degree.[26] These programs were still geared toward the teaching nurse rather than the practicing nurse.

During this time of great societal change, some women were beginning to experience new freedom and opportunities in such areas as education and the right to vote. Nursing was successfully securing a place in higher education, even though the average woman did not graduate from high school. However, this movement toward university education for nurses separated nursing education from the hospital and began to draw a distinction between the levels of education of nurses: the hospital-trained nurse and the university-educated nurse.

The first generation of superintendents continued to express concern over the academic standards of schools, as well as to promote efforts to recruit women from

middle- and upper-class backgrounds.[5] While leaders continued to espouse a professional ideology and university education, working nurses were in a milieu steeped in the tradition of the apprenticeship culture in which they were trained. The professional model of nursing and the medical work culture of nursing (both male dominated) were beginning to delineate nursing divisions and tensions that currently remain unresolved.[28]

## SUSTAINING THE PROFESSIONAL IDEOLOGY

### Assuring a place in the university

Continuing to follow the medical scientific ideal, with entrance into one university assured and licensure in place, the vision turned toward studying nursing education. A study that could be used to justify nursing's advancement, comparable to the Flexner Report, was the goal. The influence of nurses from Johns Hopkins emerged as they aligned themselves "with the rising authority of science demonstrated by the new medical ideal embodied in the Hopkins Medical Institution."[28(p36)] Nutting, in her belief in self-determination and self-regulation for nursing, urged nurses to learn the method of scientific inquiry to conduct research that would lead to the legitimation of nursing as a profession.[18]

After 10 years of persistent effort by Nutting, the Rockefeller Foundation began to look at the possibility of producing a study of nursing education similar to the Flexner Report. In June of 1919, Josephine Goldmark, after much persuasion by M. Adelaide Nutting, was appointed Secretary to the Foundation's committee.

Finally, a national study of nursing education was a reality: the Goldmark Report was chaired by C-E. A. Winslow, a public health specialist (not a physician); a trained research specialist, Goldmark, was the principal investigator; and financial support came from an independent foundation.[29] The final study, published in 1923, became popularly known as the "Goldmark Report."[29] Although the Goldmark Report did not have the desired result of enabling nurses to standardize and control the numbers of nursing schools, Goldmark was as critical of the existing schools of nursing as Flexner had been of the medical schools.[2,8,18] Goldmark reported that the schools' curricula did not meet the general standards of education; that the purpose of the schools was the care of the sick patients, not the education of the students; and that, generally, the schools were inadequate.[29]

One recommendation of the report addressed the need for the establishment of a reasonably generous endowment for university schools of nursing. In 1924, just 1 year after the Report, the Rockefeller Foundation financed a 5-year experiment in university education for nurses at Yale. At the end of the 5 years, a $1,000,000 endowment was contributed by the Rockefeller Foundation to ensure the permanency of Yale's nursing school, and Annie W. Goodrich became the first ever female dean.[18]

Nurses (generally nursing faculty instead of doctors) began to write and publish nursing texts. *The Trained Nurse and Hospital Review*, established in 1888, was the first national nursing and hospital journal. The Associated Alumnae, shortly after its inception, considered the possibility of establishing a professional journal that would be its

official magazine. On October 1, 1900, the Associated Alumnae published the first issue of the *American Journal of Nursing*; it is still published monthly.

At the same time, the members of the Society, under a Teachers College nurse, Isabel Stewart, continued their efforts to standardize the curricula of nursing schools. Under Stewart's leadership, guides were published that became, in effect, a "cookbook" for schools in planning programs. As she continued these efforts, Stewart's interest turned toward research, and she began working to involve students in studies and projects that needed investigation.[18]

As changes began to occur in hospitals during the Progressive Era, opportunities for the private-duty care performed by the practicing trained nurses began to disappear. Reverby[30] noted that the two-class delivery system of medical care in the late 19th and early 20th centuries meant that patients who could pay retained private-duty nurses in their homes. The poor and working class relied on hospitals and dispensaries. However, by Stewart's tenure in the 1920s, private-duty home care was becoming less common and the hospitals were being used more by all classes.

Social and political forces of this period created a need to convince the general public that hospitals were more than a place where the poor went to die. The forces behind the change included the movement from a rural society to one of urbanization and a change in hospital incomes from philanthropic, charity, and public sources; this change created a competition for patients among physicians, nurses, and hospitals. At the same time the advancement of medical science and specialization contributed to the change in hospitals. After World War II, research and scientific advances (eg, the use of antibiotics), the control of many contagious diseases, and advanced diagnostic and surgical technology became part of medical practice.

Although the private foundations no longer invested large sums of money into universities and the creation of professional knowledge, the federal government was about to take up the slack with increased support for medical research and mental health. Scientific medical practice had arrived with its accompanying technology, and the hospitals were gearing up as the new "work place" of physicians. Medical schools and medical education were subsidized by the federal government.[3,16]

To offset any moves toward national health insurance or government efforts to control medical practice, medicine claimed the autonomy of science and successfully maintained its professional sovereignty. Starr[3] described how medical research, like all scientific research, demanded autonomy as a necessary condition of free inquiry. A revisionist view of the demand for autonomy reveals that

> the inclusion of the categories of professional knowledge into schools legitimates both the knowledge and its "holders." By making particular occupational work a subject of schooling, an occupation is given legitimacy.[31(p23)]

## The movement toward a scientific base

As hospitals became the site of scientific technology and the work place of physicians, they changed away from charitable institutions using the concept of family management where the male superintendent "was regarded as the father, the nursing

school superintendent or matron was the mother, and the workers, nursing students, and patients were the children."[30(p210)] The emerging hospital model was one of efficiency and a capitalistic service institution. With funding for public health nursing denied and private-duty nursing on the wane, nurses actually had few choices for employment.

With this shift in hospital models, a need arose for hospitals to appeal for joint efficiency and mutual cooperation, rather than rely on the charitable duties of hospital employees. This movement toward hospital efficiency and scientific management did not escape the notice of nurse leaders. As they became aware of growing numbers of unemployed private-duty nurses, a solution seemed to be emerging. Using "scientific studies," hospital administrators would be shown that graduate nurses made efficient employees and that nurses could be convinced to agree to secure, steady positions as employees of the hospitals.[30]

Efficiency, based on scientific evaluation, was to become "the bridge over which nursing traveled to be accepted as a profession."[6(p144)] Numerous studies of nursing were completed at Teachers College during Stewart's tenure, mainly trying to determine the components of good, safe, and efficient hospital nursing care. However, once the nursing work was analyzed into separate components, the process could be divided into separate tasks and assigned to various workers, including auxiliary workers such as nursing assistants and practical nurses. Although partly in response to organized nursing's effort to establish its professional status, other social factors important in the development of the hospital environment helped to tacitly enforce nurses' legitimacy as skilled, rather than professional, workers. The growing division of medical labor in hospitals was the most important outcome of managers' use of principles of scientific rationalization.[6]

At the same time, a number of university schools were being developed, led by alumnae of Teachers College. Ironically, these programs were developed in the 1920s and 1930s under the jurisdiction of medical schools. Nutting wrote to Stewart about the continued need for independence:

> For it seems to be entirely clear that our efforts toward freedom in universities are going to be blocked by our medical friends. We get out from under the hospital only to pass under the hands of the medical school.[32(p2)]

Another major study of nursing education was undertaken in the 1940s and funded by a grant from the Carnegie Foundation. Although the study was initiated by nursing leadership, the investigators made the decision to "view nursing service and nursing education in terms of what is best for society—not what is best for the profession of nursing as a possibly 'vested interest.' "[33(p11)] Brown, the principal investigator, came up with conclusions and recommendations that were similar to those of the earlier Goldmark Report. She recommended accreditation of schools, as well as an emphasis on university education for

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professional nurses. Subsequent to the study, in 1949, accreditation of nursing schools became a reality under the auspices of the National League for Nursing Education (currently the NLN).

At the same time, with the loss of nursing students' free labor as a result of changes in their education, the expansion of hospitals' services and medical practice, and the emergence of third-party payment for medical services, hospitals were in a situation in which they could afford to hire nurses. However, registered nurses were in short supply. During World War II, many women responded to the patriotic call and became nurses through the federally sponsored Nurse Cadet Corps. Kalisch and Kalisch[34] describe how nurses, after sharing the hardships of war on equal terms with men, meekly went back to the home functions of wife and mother after the war, adding to the shortage. To cope with the nursing shortage, nursing assistants were developed during World War II, providing some of the patient care that nurses abandoned as they, in turn, assumed some of what previously had been physicians' work. However, a real shortage of help still existed in hospitals.

To meet this shortage, in 1951 a new kind of nursing education, again from Teachers College, was designed for nurse "technicians." This associate degree program started in community and technical colleges to educate a nurse technician in 2 years.[35] Associate degree education had hospital, not community, nursing as its focus. The intent of Mildred Montag, the designer of these programs, was to separately license graduates of the associate degree program. However, the State Board Examination for Registered Nurse Licensure became the same for the nurse with an associate degree, the nurse with a baccalaureate degree, and the nurse with a hospital education. Successful completion of this one examination allowed (and continues to allow in all but one state) every graduate to become a registered nurse. Before long, the majority of all nurses were employed in hospitals, and regardless of educational background, all registered nurses competed for the same entry-level positions.

### Graduate education in nursing

In the 1950s, conditions were ripe for nursing education to progress to universities at the graduate levels: nurses were working in hospitals, indeed, there was a nurse shortage; baccalaureate education for nurses was in place; and scientific/technological medical practice was a reality. Nurses with more skills were needed to work with advanced technology in the hospitals under the direction of physicians. Following the lines of medical practice, specialization was beginning in nursing practice, and in some university settings, nursing curricula began to move out from under the auspices of medical schools to become Schools of Nursing. Also, of great importance, there was federal financing available for higher education for nurses.

Once graduate education was in place in universities, it seemed natural for nursing to enter the scientific enterprise and advocate the development of nursing research–based programs. Grace described this "zeal for the scientific" as the higher authority replacing the earlier claims of a direct inspiration from God. "Present day nursing, needing to lay claim to higher authority to secure its place, now looks to education and the *scientific* as its basis for practice instead of God."[36(p112)]

By the early 1960s, several programs leading to doctoral degrees in nursing and a cognate discipline inaugurated the nurse scientist era. These programs were designed to build a critical mass of faculty and a receptive climate for the development of doctoral programs in nursing.[36] Currently doctorally prepared faculty are maturing and doctoral programs in nursing continue to grow. There are more than 40 programs in existence, and new ones continue to be planned. Although the recent financial crises in education may have a tendency to stem the tide of developing programs, the professional ideology has survived, and new "progress" has been achieved: master's and doctoral education leading to the development of scientific-based nursing knowledge to improve nursing practice for better patient care.

## THE SCIENTIFIC IDEAL: IMPLICATIONS FOR CURRENT IDEOLOGY

As graduate programs were being planned, a demand arose for nurses to become consumers of and active participants in research. To meet this demand, in 1953, Teachers College founded the Institute of Research and Service in Nursing Education to study and develop nursing education through research.[37] The establishment of the Institute followed closely the launching, in 1952, of nursing's first research journal, *Nursing Research*. With the publication of the journal, nursing research moved toward public and institutional recognition, for "nursing's major goal in fostering research was to achieve recognition of its professional status."[38(p24)]

The first mention of nursing science in the literature appeared in the writings of Martha Rogers.[39] At the same time, questions about the knowledge and skills of nursing were raised, culminating in questions about a theoretical base for nursing practice. These questions were raised in response to a general dissatisfaction with the isolated findings of nursing studies.[39] In 1963, Rogers wrote

> the traditional identification of nursing as "doing" is being replaced by an understanding of nursing as a body of knowledge, unique in its aggregate; the application of which represents the practice of nursing.[40(p94)]

Based on research and emerging theory, a movement toward a nursing science surfaced as a means to sustain the professional ideology. The ANA, one of the organizations planned at the 1893 World's Fair meeting, has been instrumental in fostering nursing research. The commitment of its own resources has been a factor, sometimes a crucial one, in the development of nursing knowledge.[41] Research contributions of the ANA include conducting surveys of nursing care and nursing functions; studying the nature, structure, and functioning of the ANA and its relationship to other associations; and conducting national research conferences. In 1955, the ANA founded the American Nurses' Foundation, Inc. (ANF), to promote high-level wellness and improve patient care through research by funding small nursing research projects.[42]

## FACULTY RESEARCH

Most nurses engaged in nursing research are faculty members. Nurses enter academia by successfully completing research-based

education in addition to their basic nursing education. The current ideal nurse faculty member holds an earned doctorate; some schools prefer a PhD in nursing. Overall, the number of nurses with doctorates is relatively small, approximately 8,000.[43]

At the same time, universities remain a bastion of the male order. In 1986, Namenwirth wrote:

> With white males holding most scientific posts and all positions with any prestige attached to them, the scientific enterprise itself became fused in people's minds with the character traits (real or imagined) of the typical Western, white, middle-class male. This phenomenon has made it difficult for academic hiring and promotion committees to envision women as suitable colleagues, leading to an uneasiness, which is frequently misattributed to some aspect of the woman scientist's work or personality.[44(p21)]

This is the scene that the typical nurse faculty member enters, often possessing less than a doctorate at the time she is hired, previously having been socialized as a female and a nurse, and currently teaching students in a discipline that emphasizes the values of caring, nurturing, and interacting. With this background, she enters the masculine culture of the university and its highly valued scientific framework at a time when the average woman holds less than a college degree and when the practice of nursing still requires the nurse, in many instances (depending on the setting) "to follow the doctor's orders."

A review of nursing literature reveals the commitment of most nurse researchers to the values, methods, and procedures of the dominant empiric-analytical paradigm found in most universities.[45] This type of research, defined by the goal of producing data leading to prediction and explanation, limits knowledge generation. Chinn[46] pointed out that science, from this perspective, is thought to result in true knowledge, while all other forms of knowledge are considered to be merely speculation or opinion. Believing "science" to be objective, value-free, empiric evidence of the only true way to conceptualize knowledge leads nurses to define research problems, questions, and methodologies in terms of the reductionistic tenets of the guiding empiric-analytical paradigm.

The preponderance of research that reduces humans to quantifiable variables has consequences for nursing. Researchers subscribing to this masculine view of science currently comprise the majority of nurse educators, as well as peer reviewers for both articles in journals and proposals for research funding. In this way, a control on the types of knowledge which are taught, generated, disseminated, and funded can be maintained in what Chinn[47] has identified as a rather closed system.

The adherence of early nursing leaders to the socially successful, available, medical, male-oriented professional ideology has left its imprint on nursing and nursing education. The assumptions at the base of the nurse leaders' imitative behavior of physicians' professional ideology equated being professional, in part, with receiving university degrees and being scientific. Allen[48]

***The adherence of early nursing leaders to the socially successful, available, medical, male-oriented professional ideology has left its imprint on nursing and nursing education.***

stressed that professionalization, as a strategy based on that ideology, underemphasizes the importance of gender and social class in structuring the work of nurses. Melosh concluded that the tension between the two cultures of nursing—the academic and the hospital workers—

> still underlies and informs nurses' efforts to define and control their own work. Leaders have gradually won much of their program; yet as more and more nurses earn degrees, they are discovering the limits of credentials as a means to gain the prerogatives of professionals.[49(p207)]

## IMPLICATIONS FOR THE FUTURE

Nursing is a major service industry within a system that has come to dominate the United States economy and the labor force.[6] As scientific technology in hospitals continues to grow, nurses as employees of hospitals are the mainstay of the hospital work force. About 68% of the more than 2 million registered nurses in the United States work in hospitals. However, the cultural ideology of a woman's place is still apparent in the medical division of labor: nursing remains primarily a work force of women (97%).

A close examination of the development of a professional ideology in nursing reveals how it divides nurses and confines its proponents to professionally limiting and ultimately self-defeating values. Tensions and lack of unity between a highly educated elite and hospital-based nurses continue to emphasize the differing values of the stratified levels of nursing personnel. Twenty-five years of efforts to legitimize some levels of the hierarchy through a change in state Nurse Practice Acts and licensing have lost momentum, even though North Dakota has instituted two standard educational levels of licensure: a bachelor of science in nursing and an associate degree in nursing. Although it can be argued that the actions of the early nursing leaders helped nursing to earn the level of professional respect that it currently has, it is also clear that unintended and unacknowledged consequences of "the assumptions in which we are drenched"[1] have resulted from refusing to take an approach that celebrates, rather than negates, the female constituents and the domestic, female roots.

The unintended consequences of following the male professional model have resulted in the following:

- acceptance of a nonautonomous technical role with patients;
- lack of a generally agreed to, cohesive view of the role of professional nursing;
- often emotionally laden splinterings between those who have a BSN or a higher degree and those who don't;
- reluctance in the work place to assert and trust nurses' feminine values and views of caring;
- acceptance of the "scientific method" as the acceptable form of nursing research; and
- a failure to effectively challenge the limitations of biomedical research that narrowly define human experiences in quantifiable variables.

However, every ideology has an enabling side as well as a constraining side. Nurses were able, by following the professional ideology, to develop professional organizations, obtain classes in higher education, gain licensure, obtain funding for studies of nursing education, develop graduate programs in nursing, garner federal funding for nursing education, and gain entry into re-

search funding in the National Institutes of Health. Gaining an understanding of the limits of this model may free nurses to discuss a vision of nursing that arises from the special attributes of a caring profession made up of women workers. This vision celebrates the continuity and strength of the work of its members both in academia and in practice. The patients/clients of nursing have always known that nursing care made a difference. Nightingale successfully documented the decrease in the mortality of British soldiers in the Crimea (from 42% to 2%) that occurred as a result of nursing care. Now is the time to rid ourselves of the male professional ideology that supports the belief that the way to improve nursing practice is through "expert" scientific knowledge and a belief system that supports a hierarchical position of class and gender.

As women come into their own in the work place and universities, the time is ripe for nurses to develop a perspective on professionhood that transcends the dichotomies among levels of nurses that the allegiance to the professional ideology has imposed. Nursing, according to Reverby,[6] has evolved from a mandate of care as a woman's duty to the collective institutional strength of nurses from which "the right to care" has emerged.

The professional obligation to patients and to the work of nursing that has characterized the work culture of nursing has created a moral and practical basis for its authority.[9] Nurses can transcend differences by learning from each other and synthesizing the autonomy of science and profession from academia with the moral and practical authority of practice.

In this way men and people of color will be attracted to nursing as a way to transcend the sameness, and the nursing force can become diverse. Developing a unity of purpose can help to promote nurses' collective well-being. Moccia challenges nurses "to civilize the system, to bring caring into interpersonal relations—whether between the patient and the system or among colleagues working within the system"[50(p31)] In addition, taking a stand on global issues of concern to all (eg, hunger, violence, acquired immunodeficiency syndrome, homelessness, poverty, children's rights, and primary health care) will move nursing beyond hospitals. Understanding and rising above the assumptions of our heritage, we as nurses then may be able to realize our dream of being competent, professional caregivers contributing to the well-being of people, sick or well, and give new value and meaning to personhood.

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