

Making a Difference—Women, Medicine, and the Twenty-First Century

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Women can and should make a difference in how medical care is given in the future. The increased number of women physicians presents an opportunity to make a significant impact on the quality of medical care. Data is provided on the number of women applicants to medical school, matriculants and graduates, specialty choices, the status of women in academic medicine, and the income of women physicians. Four aspects of the environment that portend important changes for medicine in the future are identified: scientific developments, alternative delivery systems and the corporate practice of medicine, the aging population and other demographic changes, and the expanding number of physicians. Some of these changes suggest opportunities for making a difference in the traditional specialties of medicine, in providing care to underserved populations, in research careers, in the shortage areas of preventive medicine and public health, occupational medicine, child psychiatry, and physical medicine and rehabilitation, and in new areas such as community pediatrics, behavioral pediatrics, and adolescent medicine. There are many choices and many decisions to be made, and each individual can choose to make a difference.

In a commencement address to a secondary school graduating class in Washington, D.C., Steven Muller, President of the Johns Hopkins University, conveyed a simple and direct message: "When in doubt, do the right thing" [1]. Muller told of being troubled with a momentous decision which was a problem for him some years ago and of seeking the advice of a respected advisor and mentor. His friend mulled over the problem, asked a few questions to draw him out further, and then simply said, "When in doubt, do the right thing." His message to the graduating class was that they were burdened with choices in this society, but they were intelligent individuals, had received an exceptional secondary education, and that at many decision points in their young lives they would know the right thing to do. He admonished them that there are all kinds of reasons why that decision is difficult, or unpleasant, or something else is more attractive and that we can easily bury our sense of right under our search for pleasure or ease. My message is equally short and simple. It is, "Make a difference," and the fact is, you will know how to do that.

THE FEMINIST VIEW

Women can and do play a very distinctive role in our society. Caroline Whitbeck, in an introduction to a special edition on women and medicine of *The Journal of Medicine and Philosophy*, points out that the interrelations between women's lives and medical care are numerous and complex, that both in the domestic setting and in the area of paid medical care the bulk of care is provided by women [2]. Her theme is that women have a particular acquaintance with the larger human goals in relation to which

273

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medical practice must be assessed. She says that philosophical reflection upon the goals, practices, and theories of medicine validates philosophical reflection upon many issues that have traditionally been of concern to women. Whitbeck quotes Ehrenreich and English, who defined caretaking and meeting of human needs as central concerns, as follows:

We [women] refuse to remain on the margins of society, and we refuse to enter that society on its terms . . . [we] must insist that the human values that women were assigned to preserve expand out of the confines of private life and become the organizing principles of society. This is the vision that is implicit in feminism—a society that is organized around human needs; a society in which child raising is not dismissed as each woman’s individual problem, but in which the nurturance and well-being of all children is a transcendent public priority . . . a society in which healing is not a commodity distributed according to the dictates of profit but is integral to the network of community life . . . in which wisdom about daily life is not hoarded by “experts” or doled out as a commodity, but is drawn from the experience of all people and freely shared among them [3].

Women physicians need not concentrate on women’s health issues to “make a difference,” but the impact of women’s health and medical needs on the medical profession historically has been significant. From the observations of Semmelweiss on the relationship of clean hands to the decline of puerperal fever to the recent reemergence of the practice of the midwife and the establishment of birthing centers even in our large tertiary-care hospitals, the influence of women’s health issues on medical practice can be observed repeatedly. The mother or woman in the house most often is the gateway to help for illness and for preventive medicine and, to a large extent, modulates the environmental and behavioral factors which determine family life.

Women physicians should not be drawn to the practice of pediatrics and obstetrics and gynecology because those are the specialties most accepting of their gender, but because they can make a difference in the health and well-being of mothers and children. The Public Health Service Task Force on Women’s Health Issues identified the three most important social changes affecting women’s health at the present time as:

1. the increasing numbers of women living in poverty;
2. the unprecedented entry of women into the labor force, including women with infants and young children, and;
3. the continuous increase in the longevity of women [4].

The health care areas in the context of this array of social changes where interventions can make a difference are enormous. Specialties which are still considered shortage categories are particularly relevant to these social changes: preventive medicine, occupational medicine, rehabilitation medicine, geriatrics, oncology, and psychiatry [5].

THE STATUS OF WOMEN PHYSICIANS

Admission to Medical School

The percentage of women in the applicant pool has steadily increased since the early sixties (Table 1).

TABLE 1
Medical School Applicants: Selected Years

First-Year Class	Total Applicants	Women As a Percentage of Total
1965-66	18,703	9.0
1970-71	24,987	10.9
1975-76	42,303	22.6
1980-81	36,100	29.5
1985-86	32,893	35.1

Source: Association of American Medical Colleges, Division of Student Services: Final Admission Action Summary Reports, Washington, DC, November 1985

Women applicants decreased for the 1985 entering class by 7.4 percent, whereas male applicants decreased by 9.1 percent. For the academic year 1984-85, there were 35,944 persons who applied to U.S. medical schools. However, only 32,893 applied for 1985-86. In 1985-86, 48 percent of women who applied were admitted; of the men who applied in 1985-86, 50.4 percent were admitted. Since the academic year 1978-79, a greater percentage of men applicants have been admitted than of women. Prior to that year, a larger percentage of the women who applied were admitted each year.

In 1985-86, women represented 34.2 percent of entering medical students. Of all medical students enrolled in 1985-86, 32.5 percent were women. Of the 16,191 expected M.D. graduates in 1986, 30.7 percent were women (Table 2). In 24 medical schools, or 19 percent, women comprised 40 percent or more of the entering class.

The Yale University School of Medicine first accepted women in 1916, following Johns Hopkins in 1893 and the University of Pennsylvania in 1914. The decision to admit women to Yale resulted from the encouragement and financial help of Henry Farnum, a professor of economics at Yale, who paid for the women's bathrooms. As his daughter Louise was in the first class to which women were admitted, Professor Farnum had a special interest in overcoming the impediment to the admission of women to Yale, which turned out to be the plumbing. Louise Farnum graduated with the highest scholastic honors and became the first woman faculty member in the Yale-sponsored medical school in Changsha, China [6].

Women in Academic Medicine

A study published in August of 1985 by Graves and Thomas from Johns Hopkins on the correlates of mid-life career achievement among 108 women physician graduates of Johns Hopkins concluded that the "deeper layers of the personality that are formed in early life long before occupational success is even considered" are principal determinants [7]. They showed, however, that in the group who entered academic medicine, career success, measured by academic rank, is positively and significantly associated with academic standing at the end of the fourth year of medical school.

For every medical school class between 1940 and 1973, except those of 1945 and 1946, a greater proportion of the women than the men graduates were on medical school faculties [8]. Women represented just under 15 percent of the total faculty (full- and part-time in all degrees) of American medical schools in 1971-72 and again in 1973-74; only a small percentage of women were then at the level of professor or

TABLE 2
Women in U.S. Medical Schools

Academic Year	Women in Entering Class		Total Women Enrolled		Women Graduates	
	Number	(%)	Number	(%)	Number	(%)
1975-76	3,656	(23.8)	11,527	(20.5)	2,200	(16.2)
1980-81	4,970	(28.9)	17,373	(26.5)	3,892	(24.8)
1984-85	5,705	(33.6)	21,287	(31.7)	4,903	(30.0)
1985-86	5,788	(34.2)	21,624	(32.5)	4,968	(30.7)

Source: 86th Annual Report on Medical Education in the United States: 1985-86. JAMA 256 (12, September 26): 1986

associate professor. In terms of full-time faculty, 13.3 percent were women ten years ago compared to the 15.2 percent in 1978 and 16.4 percent in 1981 [9].

In a 1982 study of women and minorities, at the age of 47 or above, only 28 percent of the women had attained the rank of full professor, whereas 61 percent of the men in that age group had attained the rank of full professor. Table 3 shows the percentage of the total by gender at each rank for faculty with the M.D. degree. Table 4 shows the percentage of women who have attained each rank as compared with men. These 1981 figures are the latest published by the Association of American Medical Colleges. The obvious conclusion of the 1982 study was that, for all degrees and regardless of age, women faculty are not found in the higher ranks as frequently as male faculty [10].

The 1982 AAMC study also showed that women tend to accept faculty appointments within a shorter period of time after graduation than do men M.D. graduates. The authors suggest that female M.D. faculty take less graduate medical education before accepting a faculty position than their male counterparts, which may account in part for the fact that they do not obtain higher ranks throughout their careers [10]. Others attribute this finding to women working part-time at various stages of their careers. Judith Lorber would attribute the failure to achieve the higher professional ranks in greater numbers, in part, to cultural bias and discrimination [11].

As shown in the study of the Association of American Medical Colleges medical school directories by Judy Braslow in 1975-76, 1977-78, 1979-80, and 1980-81, relatively few women faculty hold administrative positions in U.S. medical schools, although by the late seventies significant increases were occurring. No medical school was headed by a woman dean during these years. The number of associate deans

TABLE 3
Medical School Full-Time Faculty with M.D. or M.D./Ph.D. Degrees
by Gender and Rank, 1981

Rank	Total	Men	Women
Professor	100.0	96.0	4.0
Associate Professor	100.0	90.8	9.2
Assistant Professor	100.0	85.2	14.8
Instructor	100.0	80.5	19.5

Source: Higgins EJ, Jolly HP: Participation of Women and Minorities on U.S. Medical School Faculties, July 1982, Appendix B, Tables 5 and 6. Washington, DC, Association of American Medical Colleges

TABLE 4
Medical School Full-Time Faculty with M.D. or M.D./Ph.D. Degrees
by Gender and Rank, 1981

Rank	Total Faculty Percentage in Rank	Percentage in Rank	
		Men	Women
Professor	29.9	32.2	11.2
Associate Professor	22.9	23.3	19.5
Assistant Professor	37.4	35.7	51.5
Instructor	9.8	8.8	17.8
Total	100.0	100.0	100.0

Source: Higgins EJ, Jolly HP: Participation of Women and Minorities on U.S. Medical School Faculties, July 1982, Appendix B, Tables 5 and 6. Washington, DC, Association of American Medical Colleges

among women increased from 3.4 percent in 1975 to 7 percent in 1980, and at the assistant dean level there was an increase from 11.6 percent to 17.1 percent [12]. In the history of U.S. medical schools since World War II, there had been only one woman dean of a coeducational medical school until this year. My dear friend Leah Lowenstein was Dean of Jefferson Medical School from 1982–83. Tragically, Leah died in the spring of 1984. Nydia de Jesus is now Dean of the University of Puerto Rico School of Medicine, and B. Lyn Behrens is Dean of the Loma Linda University School of Medicine. In 1978, 33 women chaired academic departments (out of over 2,400 chairs); in 1980 there were 57 women chairs, and, by 1984, 64 women chairs. Of the 64, 23 were in the basic sciences, 31 in clinical sciences, and ten in interdisciplinary departments [13].

THE CHANGING ENVIRONMENT OF MEDICINE

The social environment in which medicine is practiced has experienced striking changes in recent decades. Neither the rate nor the enormity of the change has slowed as yet. These compelling areas of continuing change include: scientific developments and advances in biology and medicine; new corporate forms of the practice of medicine and a variety of alternative delivery systems; the aging population and other demographic changes; and the health manpower supply, particularly the expanding number of physicians.

Scientific Developments

The revolutionary change of the past generation has been the confluence of the medical sciences that has literally brought all the basic sciences and their exchange with clinical medicine to the single language of biochemistry and molecular biology. Such scientific and technological developments will continue to have the most profound impact on our understanding of nature and the practice of medicine. Young physicians must be well prepared to understand and apply the revolutionary advances that will occur over a practice life span of 40 years or more. The science of medicine will be more demanding than ever before, but the remarkable advances in genetics, immunology, transplantation, diagnostic and therapeutic techniques, and many other areas offer the capability of enhancing the quality of life in ways not previously possible.

In a recent issue of *Daedalus* dedicated to the memory of Walsh McDermott, David Rogers pointed out that while medicine is deeply rooted in the sciences, it is also deeply rooted in the samaritan tradition, by which he means the compassionate, humanistic features of good doctor-patient interactions. Rogers makes the important observation that both science and samaritanism are directed toward the same goal—that of tempering the harshness of illness and disease [14].

While the skeptics believe that these functions are not found together in many of our younger physicians, I am not willing to accept that judgment. In the future, with a larger proportion of the population living to a more advanced age with or without the chronic diseases of arthritis or cardiovascular disease, or problems of nutrition or osteoporosis, it will be essential that the physician apply the new technology in the total context of the psychosocial as well as the physical well-being of the individual patient, so that to the extent possible a vigorous and independent life is extended until its natural end.

Alternative Delivery Systems and the Corporate Practice of Medicine

Paul Elwood has been quoted as predicting that in the future the health care delivery world would be dominated by ten or so large national corporations [15]. The suggestion has been made that the medical schools join forces to form one large consortium to offer health care at strategic locations across the country. In Minneapolis, about 40 percent of the population currently belongs to an HMO and 60 percent is the predicted figure for 1990. Medical school faculties are forming group practices and HMOs and competing to provide student health services, employee health services, and primary care, as well as tertiary care, in the major teaching hospitals. All types of hospitals, clinics, and extended-care facilities are merging or forming vertically integrated systems to provide a range of services and assure referral networks.

Changes in financing health care are affecting the way care is given. More services are being provided in less costly settings outside the hospital, such as outpatient surgery centers. The decrease in length of hospital stay which we have experienced recently may level off as only the sicker patients are admitted. Careful projections of health care spending to 1990 have been made by Arnett et al. [16], taking into account many such factors. While expenditures can be predicted, we cannot really know what effect these variables will have on the physician's personal practice and income in the future.

The physician portion of personal health services is predicted to increase slightly from the 1984 share of 22.1 percent to a 1990 level of 23.2 percent; per capita expenditures for physician care are projected to increase from \$307 in 1984 to \$510 in 1990 [16]. We know that a larger proportion of women than men has always gone into salaried positions and institutional practice. While such positions will be offered in greater numbers in the future, women may find their male colleagues equally interested in practice in more organized settings.

Alternative delivery systems, particularly HMOs, are being scrutinized on quality of care issues. Cost savings are being realized throughout the health care system, but the public is questioning the relationship of the quantity with the quality of health care. The impact of regulation and competition need not have a negative effect on quality, either real or perceived. More careful, complete, and timely patient records and better risk management programs have been improvements. Vertically integrated health care systems and computer technology permit the development of the most comprehensive

monitoring systems for quality assurance. Future physicians will find computer-assisted surveillance of practice patterns standard procedure, whether they practice singly, in groups, or in large systems. Consumers and purchasers of medical services are now also interested in quality, with the result that quality is becoming a marketable asset [17,18]. The attention to quality assurance can be viewed not only as a positive influence on the standards of medical care but as an appropriate consort to cost-containment policies. If appropriate and valid data bases and monitoring systems can be established, attention to quality assurance can balance the tendency to allow delivery systems to be driven solely by economic considerations.

The Aging Population and Other Demographic Changes

The most significant demographic change ahead is the accelerating growth of the population over the age of 65. In 1980, there were 25.7 million people or 11 percent of the population over age 65, and by 1990 it is projected that the population over 65 will reach 31.7 million or 12.6 percent. Those 75 years of age or over are predicted to be 5.4 percent of the population by 1990. Such shifts in the age of the population will influence medical care expenditures and services because there is a disproportionate use of health care by the elderly. If the aged escape costly acute illness, the increasing longevity subjects them to many lingering, chronic illnesses [16,19].

By the year 2000, the projected older population will be 35 million, of whom 20 million will be women. The multiple, long-term chronic illnesses which are prevalent in elderly women include visual and hearing impairments, arthritis, hypertensive disease, coronary heart disease, cerebrovascular disease, diabetes, impairments of the lower extremities and hip, chronic bronchitis, diseases of the urinary system, gastrointestinal disorders, and all types of anemia. In comparing older women with their male counterparts, data show that, in addition to more diabetes, women have higher rates for hypertension and moderate to severe arthritis [4]. Osteoporosis is extremely prevalent in post-menopausal women. Annually, 200,000 women suffer hip fractures from this loss of skeletal mass.

There are many men and women, however, who lead very active and enjoyable lives well into old age. The physician of the future must be concerned with the promotion of health and access to health care as well as other psychosocial factors that contribute to maintenance of good health of this particular segment of the population.

The changes in the status of women—more single-parent families and more women in the workplace—present new occupational health issues of concern to women. A new study by the Census Bureau shows that in the 18-to-24 age group, where out-of-wedlock births are most common, the illegitimacy rate is 31.1 percent overall—20.2 percent for white women and 74.5 percent for blacks. While it appears that today much attention is directed to a more healthy life style—more exercise and better nutrition—it is the socioeconomic middle class for the most part that responds to these admonitions. Large segments of the population remain in the grip of poverty. Drug and alcohol abuse are a response to despair and stress, whether found in the poor, those on the fast track, or the lonely young or old. The rate of change in our society and environment, a stress itself, is not likely to abate. An exquisite awareness of the health consequences of these many societal and environmental changes will be essential for the future physician.

If we are to improve health in adult life, attention must focus on the early years of life and the social system that surrounds the mother and child. The objective is not only

physical survival of the infant but the prevention of emotional, behavioral, and learning problems. Roghmann [20] points out that an important restructuring of pediatrics, for example, includes community pediatrics and public health, behavioral pediatrics, adolescent medicine, and developmental pediatrics, including care for the handicapped and chronically ill child. These few examples of the changing characteristics of the population and the impact of societal and environmental conditions on them hint of new directions and emphasis for medicine in the future that can make a difference—not only survival and the absence of acute illness, but enhancement of the quality of life.

The Expanding Number of Physicians

One of the most striking changes is the growth in the number of physicians since 1970. In fact, it is the expanding supply of physicians which is allowing the rapid changes in the structure of health care delivery services to occur. The robust growth of HMOs and for-profit enterprises would not occur if competition and similar market forces were not a reality. Competition would not be a threat in the presence of a shortage of manpower. In 1979, the Graduate Medical Education Advisory Committee (GMENAC) developed a supply model which predicted surpluses or shortages in the various specialties of medicine by 1990 and 2000 [5]. The estimates were derived by studying the then current utilization patterns based on population, the changes in the ages of the population, and predicted incidence of illness and injury in the future. GMENAC projected that the supply of physicians would exceed requirements by 70,000 in 1990 and by 145,000 by the year 2000. Between 1978 and 2000 the physician supply will increase by 72 percent while the U.S. population will increase by only 19 percent. The number of physicians per 100,000 population will increase from 171 in 1978 to 220 in 1990, and to 247 by the year 2000. By 1990, approximately 40 percent of all practicing physicians will have entered practice since 1978 [21]. GMENAC predicted shortages in child and general psychiatry, emergency medicine, preventive medicine, physical medicine and rehabilitation, and anesthesiology, and very slight shortages in hematology/oncology, dermatology, and gastroenterology. Most of the major primary care specialties will have fulfilled requirements, including general pediatrics, family practice, and general internal medicine by 1990. General surgery, orthopedics, neurosurgery, ophthalmology, obstetrics and gynecology, radiology, pathology, and neurology were estimated to have significant surpluses [22].

There is considerable controversy as to whether an oversupply is undesirable. Conventional economic theory holds that an oversupply will be self-correcting and that the outcome will be more services for patients at lower cost per unit of service. Others believe that physicians induce demand for service to maintain their incomes.

The GMENAC projections are an acceptable reference point because they are so widely known and there is no other such data base. There have been such dramatic changes in care delivery patterns in the past five years, however, that the GMENAC projections are no longer a good fit. Karen Davis concludes that changing technology, more salaried physicians, more capitation, and other changes in reimbursement will radically affect the projections. One firm prediction is that real incomes of physicians will continue to decline [22]. Davis suggests that the expanding physician supply should be directed toward achieving more beneficial effects such as: channel more physicians to practice in underserved areas; serve such population groups as the poor, the frail elderly, and children; and encourage more physicians to enter occupational

and preventive medicine where needs are substantial and significant contributions to improving the health of the public can be made.

She cautions that the times ahead promise to be ones of tensions between newly trained physicians and older practicing physicians, practicing physicians and physicians at academic medical centers, physicians and non-physician health providers, and between the medical community and payers of health care services. With wisdom and leadership, however, potential problems can be turned into opportunities—opportunities to improve the health of our people and to *make a difference*. An increasing supply of physicians can support innovation, further improve geographic distribution [23], and encourage young physicians once again to pursue careers in research and clinical investigation.

THE WOMAN PHYSICIAN IN PRACTICE

In 1978, women comprised 41 percent of the total labor force in the United States; one out of two women of working age was employed, up from 29 percent of the labor force in 1950 [9]. In the medical and health services industry, which employed over 4.8 million workers in 1978, women represented 80 percent of that work force. Of the 4.8 million health workers, only about 30,000 women were physicians in this same year. The overall health care labor force is dominated by women, but their largest numbers are in the lowest paid health care occupations. In 1984, expenditures for medical and health services were \$387 billion, or 10.6 percent of the gross national product, one of the largest “industries” in the United States and obviously a significant force in the economy.

What implications may the manpower changes have for women physicians? Steinwachs and co-workers have compared the requirements for primary care physicians in HMOs with projections made by the GMENAC [24]. Using the GMENAC model and data from three different HMOs, their projections suggest that 20 percent fewer primary care physicians for children and 50 percent fewer primary care physicians for adults will be needed to meet national primary care needs in 1990 than projected by the GMENAC. One of the many GMENAC assumptions was that the proportion of female physicians would remain constant, but we now know that it is rising rapidly. The proportion of female physicians in the year 2000 is estimated to be 26.5 percent. This is based on a model used by Lanska et al. that projects the entering class in 1991 to be 45.3 percent women [25]. Lanska accepts the work of Powers et al. [26] and Jussim and Muller [27] which estimate that women physicians practice 40 percent fewer hours over their lifetimes, compared with their male counterparts. The reasons for the decreased number of practice hours include leaves of absence for childbearing, ongoing child care and household responsibilities, and the fact that more women are in salaried positions and may be able to work more regular hours. Lanska et al. discount Marilyn Heins et al.’s Detroit study [28], which attributed much higher total activity, but they accept Bobula’s work, done in 1978, which found that men worked 20 percent more hours per week in office-based practices than women physicians in comparable settings [29]. Applying these findings to the GMENAC model, the Lanska group concluded that the estimated physician surplus in the year 2000 (145,000) should be reduced by 41,000, or approximately 28 percent of the GMENAC-predicted surplus to take into account the effect of the increasing number of women physicians.

The American Medical Association’s *Socioeconomic Monitoring System* data is the

TABLE 5
Differences in Employment Status, Practice Hours, and Patient Visits
Between Female and Male Physicians, 1985

	Percentage Difference Between Female and Male Physicians		
	Share Self-Employed (%)	Total Practice Hours per Week (%)	Total Visits per Week (%)
<i>All Physicians</i>	-26.0	-9.1	-23.3
<i>Specialty</i>			
General/Family practice	-32.1	-5.6	-26.5
Medical specialties	-33.8	-18.4	-21.6
Surgical specialties	-22.7	0.7	16.5
Other specialties	-12.1	-4.7	-29.6
<i>Age Group</i>			
40 years or less	-31.3	-11.8	-23.8
40-55 years	-22.2	-8.2	-26.3
56 years or more	-11.0	-13.6	-18.5
<i>Employment Status</i>			
Self-employed	—	-6.9	-20.9
Employee	—	-9.5	-18.9

Source: Personal communication: Dr. Richard Wilke, American Medical Association Center for Health Policy Research, April 2, 1986

primary source of information about physicians in the United States. The SMS is described in the American Medical Association publication entitled *Socioeconomic Characteristics of Medical Practice*. Various sample statistics are contained in the publication, the survey methodology is explained, and response rates given. Information on experience and marital status is not included in these publications, however; therefore, the information in Tables 5 through 7 was obtained directly from the Center for Health Policy Research. In March 1984, SMS reported that the percentage of women physicians had reached 12.2 percent by 1981 and that 16.3 percent of physicians under age 45 were women [30].

Women physicians were less likely to be self-employed and, on average, practiced

TABLE 6
Annual Income Levels by Experience, 1984

Years of Practice	Annual Average Net Income ^a	
	Men	Women
0-4	\$90,164	\$56,798
5-9	123,910	68,303
10-19	134,913	81,419
20-29	112,814	82,750
30+	88,000	69,840

^aAfter expenses, before taxes

Source: Personal communication: Dr. Richard Wilke, American Medical Association Center for Health Policy Research, April 2, 1986

TABLE 7
Hours Worked per Week by Marital Status

Years of Practice	Marital Status	Hours per Week	
		Men	Women
Total	Married	58.1	51.8
0-9	Married	63.3	52.0
10+	Married	56.9	51.5
Total	Unmarried	55.5	56.3
0-9	Unmarried	59.6	59.9
10+	Unmarried	52.1	51.8

Source: Personal communication: Dr. Richard Wilke, American Medical Association Center for Health Policy Research, April 2, 1986

fewer hours and had fewer patient visits per week than their male counterparts in 1983. Table 5 shows that in 1985 the share of female physicians who were self-employed was 26.0 percent smaller than that of male physicians. Women physicians on average worked 9.1 percent fewer hours and saw 23.3 percent fewer patients than male physicians.

The SMS data show that women physicians, on average, earn less from medical practice than male physicians. The average net income (after expenses, before taxes) of men physicians in 1982 was \$102,000, compared to \$65,200 for women physicians. Adjusting income for hours practiced, the earning differential is reduced from 36 percent to only 24 percent. The SMS analyzed the earning gap by differences in hours of practice, specialty, age, and employment status, and ultimately concluded that the rate of growth in both net income and net income per hour in the past decade has been higher for women than men within the four specialty classifications and two of three age groups listed in Table 5. Thus, the earnings differential appears to be closing slowly over time.

By 1983, average annual income for women had increased to \$68,372, a 5.4 percent increase over 1982; for men it had increased to \$112,677, a 9.9 percent increase. Inflation was considered to be 6.6 percent during this period (Table 6). It appears that in almost every situation, the incomes of women physicians are lower than those of men. If married, women physicians work slightly fewer hours and, on the average, see fewer patients per hour, although this differs by specialty. Unmarried men and women appear to work similar hours. It is of interest to note that, married or not, women physicians work more than 50 hours per week and do not limit practice to a 40-hour week (Table 7).

CHOICES OF RECENT GRADUATES

Dr. August Swanson of the Association of American Medical Colleges provided data derived from a subset report of women versus men of the 1985 medical school graduation questionnaire [31]. Ten thousand eight hundred and forty-six graduating students responded, 3,328 of whom were women. Ninety-five percent of both men and women were graduating from M.D. programs; all others which represented various degree combinations were similar except for the joint Ph.D./M.D. achieved by 0.7 percent or 23 of the women and 1.2 percent or 90 of the men.

TABLE 8
Specialty of First Choice^a

Selected Specialties	Number of Women	Percentage	
		Women	Men
Anesthesiology	134	4.4	6.1
Dermatology	86	2.8	1.1
Family Practice	412	13.6	13.2
General Internal Medicine	319	10.5	10.8
Medical specialties	278	9.4	11.0
Obstetrics and Gynecology	286	9.4	3.5
Ophthalmology	71	2.3	4.1
Pathology	83	2.7	1.3
General Pediatrics	336	11.1	3.5
Pediatric specialties	125	4.2	1.6
Preventive Medicine and Rehabilitation	41	1.4	1.1
Preventive Medicine	6	0.2	0.2
Psychiatry	157	5.2	3.6
Child Psychiatry	62	2.0	0.6
General Surgery	97	3.2	7.5
Orthopedic Surgery	40	1.3	7.6
Emergency Medicine	66	2.2	3.2
Neurology	49	1.6	1.8
Diagnostic Radiology	113	3.7	5.0
Therapeutic Radiology	19	0.6	1.0
Plastic Surgery	35	1.2	1.5

^aSelected list of specialties

Source: 1985 Medical Student Graduation Questionnaire: Subset Report, Women Versus Men. Washington, DC, Association of American Medical Colleges, April 1986

Table 8 shows the first choice of specialty if decided, or first choice even though undecided, for men and women graduating in 1985. The most striking differences in choice between women and men are obstetrics and gynecology, pediatrics, psychiatry, orthopedic surgery, and surgery.

Twenty-eight and one-tenth percent of women and 25.6 percent of men indicated their first choice career activity as clinical science, teaching, and research in an academic setting. Thirty-four and eight-tenths percent of women and 35.2 percent of men chose private clinical practice in a group of three or more physicians. Eight and three-tenths percent of women and 5.2 percent of men were choosing salaried clinical practice in a hospital, and 5.8 percent of women and 1.4 percent of men chose prepaid group clinics, according to the AAMC study. A 1983 American Medical Association study quoted in the *Wall Street Journal*, January 13, 1986, indicated that 39 percent of physicians in patient care younger than 36 years of age were employees rather than running their own practices [32].

In response to the question, "Do you plan to locate in a socioeconomically deprived area?", 21.7 percent of women graduates and 13.1 percent of the men said yes. Women in the 1985 graduating class appeared to be slightly more adventurous than the men; 16.9 percent versus 15.2 percent took a clinical educational assignment in an inner-city community remote from the medical school, 9.8 percent versus 8.1 percent went abroad, and 53 percent versus 49 percent took a clinical elective at another medical school.

Women physicians marry in the same proportion as women generally, but somewhat later in life, have fewer children, and over half marry physicians. Of the 1985 class, 49.5 percent of graduating women and 47.9 percent of graduating men had not yet married; 33.4 percent of the women were married, and 39.8 percent of the men. Of the women, 32.1 percent and 27.9 percent of the men graduating planned to be married in 1985. Of the spouses of the women, 15.2 percent had a baccalaureate degree and 41.1 percent of the spouses of the men did; 14.7 percent of the women had spouses with masters degrees, and 12.4 percent of the men had spouses with masters degrees. Of the spouses of the women, 45.6 percent had doctorates, and 13.4 percent of the men had spouses with doctorates. Of those with doctorates, the area of the doctorate for the women's spouses was 71.1 percent M.D. or M.D./Ph.D. and 71.5 percent for the men. Whereas 90.6 percent of the women said they expected their spouses to work after they were in practice or employed, 71.9 percent of the men answered this question in the affirmative.

The few studies we have seen show that, for the most part, the married woman physician with children manages the domestic establishment, including doing the actual chores. Grey Dimond, Provost for Health Sciences Emeritus at the University of Missouri–Kansas City School of Medicine, has said that the mother's influence in the family is a precious value and “one that the career-woman physician will perform well because of the knowledge, insight, and maturity gained by being a physician. However, neither the career-woman physician nor her husband uses well her education and skill if she tries to buy groceries, cook, and clean. Those are tasks that both wife and husband must delegate—and learn how to preside over a professional household, with employed help or with the help of retired parents” [33]. This is one of the more bold published statements, yet a thought women may often have but feel some guilt in expressing, much less acting upon.

THE FUTURE

The change which is overtaking us most rapidly is the corporate or organized group practice of medicine. Paul Starr has written an impressive analysis of the changes in medical practice in the past century in *The Social Transformation of American Medicine*. He traces the historical rise of sovereignty and cultural authority of the medical profession, how the profession turned that authority into economic power and political influence, and how it is now being drawn into the orbit of corporate and bureaucratic organizational structures. He says that “HMO's now represent a competitive form of bureaucratic organization in medical care. Insurance companies, under pressure to control medical costs, search for methods to regulate decisions. Hospitals and other organizations merge into larger and more powerful corporate systems. And beyond private bureaucratic organizations looms the regulatory power of the state and federal government” [34]. He sees the industry dominated by huge health care conglomerates and the possibility of conflict and tension throughout the health care system. However, he admits that no one today could safely predict the outcome—and the outcome depends on choices that Americans still have to make. He does not overlook the fact that significantly larger numbers of women physicians can make a difference in how medicine is practiced in the future.

There has been only one stridently negative reaction to more women in the profession. In the mid-seventies, a number of radical feminists questioned the advisability of supporting the call for more women physicians. Mary Roth Walsh

summarizes this well at the end of her book, *Doctors Wanted: No Women Need Apply*, written about that time:

Convinced that medicine, as currently practiced in the United States, is elitist and exploitative, they [the feminists] have decided to concentrate on a reformation of the entire health delivery system. They see little gain in supporting women physicians who are likely to be coopted into the medical establishments and, if anything, “outman the men.” There is [was] also a feeling that attention given to the cause of women physicians comes at the expense of other female health personnel [35].

The latter refers to the large number of women in the health occupations who are paid far less and have far less status than physicians. Is there any doubt that respect and understanding of each professional’s role and contribution are at the heart of the matter? The pay differential is also a problem, but it is one all women share to some extent. An important area for attention to “making a difference” is the relationships among the health professions, and I believe all women professionals have a special obligation in this matter.

Early in his discourse on the changing place of the physician in our society, Starr speaks of the physician serving as an intermediary between science and the private experience, interpreting personal troubles in the abstract language of scientific knowledge. He suggests that physicians offer a personal relationship as well as authoritative counsel and develops a rational argument for the dominance of the medical profession. He carries the line of argument much further, however, in a line of reasoning that explains the conversion of the physician’s personal authority with patients into control of markets, organizations, and government policy [34]. As with the physician manpower projections, no one can predict the status of the physician in the future, other than to say there will be diminishing resources for health care services and continuing conflicts among a multitude of political influences and societal forces throughout the last decades of the twentieth century.

Eli Ginsberg has called the undermining of the traditional structure of the health care system “destabilization” [36]. One of the greatest concerns is that access of the poor to health care is being eroded, particularly as a consequence of the loss of the ability to cross-subsidize their care. Ginsberg expresses the overriding concern that there is a risk that important values to the medical profession, the health care system, and the greater society will be lost and asserts that whether they are lost will depend on the quality of the medical leadership and the response of the public [36].

What will this mean for the young physician, and especially the woman physician? There will be no relief from assaults—the academic, the professional, the personal. There is no escape from difficult decisions, problems, or disappointments. But who seeks and achieves limitless freedom from the tough decisions? Whatever the outcomes, the dominance of corporate structures, the loss of cultural authority and autonomy, limited resources, the quality of the one-on-one encounter of the physician with the patient need not change. That is one of the choices physicians can make—you can choose to make a difference. Being at a particular place at a particular time with a particular patient can make a difference.

We are all stubborn seekers of meaning in our lives—what is it all about, what are we doing here? When I entered medical school 40 years ago, I believed that the medical profession was a great calling; I still do. I have always believed that it is an

ideal profession for women. A career in medicine provides endless opportunity to find meaning in one's life. I believe you can make a difference wherever you work in the future—at the institutional level, in the laboratory, with the individual patient. It has to do basically with integrity, a generous heart, and commitment. Let me close with words from a great physician much admired by many friends and colleagues—Walsh McDermott. He was describing the academic medical center, but his words define the essence of medicine as a career. He said:

To me, this something special is that a medical center is one of the few places—perhaps the only place—where one can see the entire exciting process of the mind of man working at its best from start to finish.

By the whole process, I mean the entire sequence involved; the birth of an idea; the establishment of its validity; the placing it in a usable concept; the careful weighing of the moral and ethical questions that inevitably arise concerning its use; and its discriminating application for the benefit of a particular human being.

Elsewhere in our society, the individual components of this glorious sequence are decentralized both in place and in time. But in a medical center, the sequence is in continuous operation and one can see it all at once.

. . . And what is more, this whole process, which starts in the human mind and ultimately helps the mind or body of another, takes place in the physical setting in which the major events of life are witnessed every day. The joyous birth of a child, the hope in the face of the patient who is recovering, the sadness of those about to be bereaved, and above all the great gallantry with which most people meet their death. These episodes of life and death are no mere backdrop for the intellectuality within the institution's walls—they are its major purpose.

I am convinced that it is this fierce acceleration of the process, this ability to witness an idea from its start to its actual application for man's [own] benefit, that gives the medical center its very special character [37].

There will be many choices and many decisions to be made; you *can choose to make a difference*.

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