

The Reform of the Medical Schools

Learning To Heal. The Development of American Medical Education. KENNETH M. LUDMERER. Basic Books, New York, 1985. xvi, 346 pp. \$21.95.

Abraham Flexner's *Medical Education in the United States and Canada*, issued in 1910 as Bulletin Number 4 of the Carnegie Foundation for the Advancement of Teaching, is probably the most important single document in the history of American medical education. After a yearlong tour of medical schools, Flexner described a horror show of automatic admissions policies, fetid dissecting rooms (one of which did double duty as a chicken yard), wretched amphitheaters in which students waited numbly for lectures by tardy professors, instructional methods founded on memorization and recitation, surgery taught without patients, obstetrics without manikins, and professors who sucked profits from their schools while ignoring research. Flexner concluded that most American medical schools were unfit to live, and, indeed, many soon died. The number of American medical colleges dropped from 131 in 1910 to 85 in 1920. Increasingly, the surviving schools affiliated themselves with both universities and hospitals, stressed research, and raised their entrance requirements. By the 1920's the modern medical school had taken shape. There were changes in medical education after 1930, but, Ludmerer contends, they have stayed within the mold forged in the 1920's.

Flexner promoted the belief that his book brought to a close the Dark Ages of American medical education and ushered in the modern era. During the last generation several historians have chipped away at this view. In *Learning To Heal*, Kenneth Ludmerer provides a compelling synthesis of the new scholarship as well as several rewarding insights of his own. He argues that between 1870 and 1910 American medical education made remarkable forward strides in virtually all of the directions advocated by Flexner. The groundwork had been laid as early as the 1850's, when young American medical students in Germany began to acquire a taste for laboratory research and a conviction that medical knowledge was ever expanding. Upon their return, however, most of these pioneers disappeared into private practice, for American medical schools had no place for them. Even elite, French-trained medical educators, such as Harvard's Henry J. Bigelow and Oliver Wendell Holmes, Sr., actively resisted research, believing that their task was statistical count-

ing and classification of diseases rather than manipulation of nature in laboratories.

The prime movers behind the shift toward research were nonmedical educators like Harvard's Charles W. Eliot and the University of Michigan's James B. Angell. Eliot and Angell believed that knowledge was always evolving, that to reason inductively from sensory perceptions was the best way to think and to teach, and that universities should become centers for research. Not only were their ideas compatible with those of the German-trained physicians, they were in a position to offer the physicians full-time professorships. During the 1870's and 1880's Harvard, Michigan, and the University of Pennsylvania broke from the pack of medical schools, and after 1893 they were joined and surpassed by the Johns Hopkins Medical School. Graduates of these schools populated avant-garde colonies in schools of the second and third rank; between 1879 and 1893, for example, over a hundred Pennsylvania medical graduates secured positions in American medical schools. The influence of these men was enhanced by the rising public veneration for the germ theory of disease (the first useful effect of laboratory research) and by the coincidental rise of high school and college enrollments, which made it easier to raise admissions standards. By 1905, Ludmerer concludes, it was clear that reformers of medical education would reach their goals.

Where does this leave Flexner? Ludmerer's answer is that Flexner was the dominant figure in reform, but not for the reasons usually enumerated. Although Flexner saw himself as a virtual John the Baptist of reform, he was the product of many of the forces that had already assured the success of reformers. He was not a physician, but he was a Hopkins graduate and a successful product of the emerging academic meritocracy of the late 19th century. His studies in psychology and philosophy led him to venerate John Dewey and progressive education. Dewey's emphases on learning as a process and on learning by doing resembled Eliot's philosophy. To these formative influences Flexner added the muckraking spirit of the Progressive era. Like Ida Tarbell's exposé of Standard Oil and Upton Sinclair's scathing indictment of the meat-packing industry, *Medical Education in the United States and Canada* bristled with caustic sarcasm and a disposition to simplify for effect. Flexner did not start the reform of medical education, but he popularized it and, more important, gave it a clear direction. Al-

though the ultimate triumph of reform had been assured before 1910, reform could still have taken any of several directions. One possibility was the creation of a two-tiered system, in which some schools would emphasize research and others focus on training practitioners. But Flexner would have none of this. He wanted all medical schools to conform to a single standard based on high admissions requirements, hospital and university affiliations, and research.

Contrary to popular belief, most medical educators welcomed the Flexner report and used it to loosen the purses of the foundations during the ensuing decade and a half. Indeed the medical educators are the heroes of Ludmerer's story. Although the medical profession gained immensely from educational reform, he rejects the idea that the profession chose educational reform as a device to upgrade its status. Reform was not the child of physicians in general, of state licensing boards, or of the American Medical Association. Its architects were medical educators who, initially, had little to gain and a great deal to lose by reform, for reform not only was expensive but threatened to reduce student enrollments and fees. At the same time, Ludmerer contends that reform was more broadly based than is often realized. Reformers gained allies not only within foundations but from the public at large, which increasingly associated educational reform with better medical care. When the University of Pittsburgh needed \$6 million in 1926 to affiliate with Presbyterian Hospital, for example, it turned successfully to public subscription.

Ludmerer recognizes that reform littered the field with casualties. Women, blacks, and the poor, who could pay their way into the old proprietary schools, were usually shut out of the new type of school. Impoverished students were not the only losers. Like business corporations, reformed medical schools were soon afflicted by bureaucratic elephantiasis. Once devices to advance the professional ambitions of locally prominent private practitioners, medical schools often became places where no one was in charge. Research proved to be a whimsical goddess, never satisfied with propitiatory sacrifices. By the 1920's even Flexner had grown critical of overemphasis on research.

Though recognizing the darker side of medical reform, Ludmerer resists the fashion of carping at medical education. His immersion in the past gives him a wise respect for the present, warts and all. *Learning To Heal* is richly informative, arrestingly insightful, and judiciously balanced.

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