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## BACKGROUND BOOKS

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### HEALTH IN AMERICA

"I observe the physician," wrote the English poet John Donne in 1623, "with the same diligence as he the disease." Yet until the 20th century, doctors and diseases were largely neglected by historians, and few good general histories exist today.

One of them is **A Short History of Medicine** (Oxford, 1928; 2nd ed., 1962). Author Charles Singer reckons that not until the 1500s did European medical science attain the level of sophistication reached by the Greeks in the 6th century B.C., notably in their studies of anatomy and physiology.

When Europeans ventured to the New World, they brought their medicine (as well as smallpox and measles) with them.

In a well-written textbook, **Public Health: Its Promise for the Future; A Chronicle of the Development of Public Health in the United States, 1607-1914** (Macmillan, 1955; Arno reprint, 1976), Wilson G. Smillie, a Cornell scholar, describes the devastation wrought in the Americas by smallpox. Introduced by the Spanish *conquistadores* during the early 1500s, it killed half the Indian population of Mexico and quickly spread throughout the Western hemisphere. In New England, smallpox wiped out 9 out of 10 Indians shortly before the Pilgrims landed at Plymouth Rock in 1620, leaving the way clear for relatively peaceful British settlement.

Medical progress in 18th- and 19th-century America was hampered by physicians' ignorance and by hostile popular sentiments. Covering **Medical Education in the United States Before the Civil War** (Univ. of

Pa., 1944, Arno reprint, 1972), historian William F. Norwood notes that public feelings ran high against the dissection of human bodies. (In 1788, an antidissection lynch mob attacked New York Hospital; seven rioters were killed.) As a result, many doctors remained largely ignorant of the human body's internal structure.

The rise of Jacksonian democracy in 1828—with its distrust of institutions and authority—brought calls from state legislators for "free trade" in medicine as in commerce. In **The Formation of the American Medical Profession: The Role of Institutions 1780-1860** (Yale, 1968), University of Virginia historian Joseph F. Kett writes that during the 1830s and '40s, nearly every state repealed its medical licensing laws. The inevitable result: rampant quackery.

Laissez faire medicine came at the worst possible time. Crowded by new waves of immigrants, most cities suffered steady increases in their annual death rates. In New York City, for example, the death rate climbed from 1 in 46.5 in 1810 to 1 in 27 in 1859. Sanitation was virtually unheard of, as was a balanced diet.

After the Civil War, European innovations (the use of morphine and quinine, the hypodermic needle, and the microscope) caused many U.S. doctors to abandon such medieval cure-alls as bleeding.

The disheveled state of American medical education, however, changed only with Abraham Flexner's exposé, **Medical Education in the United States and Canada** (1910; Arno reprint, 1972).

Flexner, founder of Princeton's In-

stitute for Advanced Study, reported that many medical students could barely read or write. The only prerequisites for opening a medical school, it seemed, were a skeleton and a couple of practitioners willing to teach. Flexner argued that fewer schools would produce better doctors. Twenty schools closed to avoid being publicized by Flexner. Ten years later, the number of U.S. medical colleges had decreased from 155 to 85. Of those 85, most became affiliated with universities or hospitals, per Flexner's recommendation. Medical schools began admitting only applicants with at least two years of college.

With discoveries such as penicillin (1928) and the wider application and standardization of technical procedures (x rays, for example), medical knowledge quickly grew. Doctors found it difficult to keep up; they began to specialize.

Rosemary Stevens, professor of public health at Yale, reports in **American Medicine and the Public Interest** (Yale, 1971, cloth & paper) that the percentage of U.S. doctors specializing in a single branch of medicine rose from 17 percent in 1931 to almost 80 percent in 1970.

As doctors have become more specialized, so have our notions of disease—once considered the result of vague “ill humors.”

The connection between occupation and disease was noted in the early 16th century by Georgius Agricola, a doctor in the German mining town of Joachimsthal. Agricola's observation that miners contracted certain lung diseases by inhaling mineral dust is recounted in British physician Donald Hunter's **The Diseases of Occupations** (Little, Brown, 1955; 6th ed., 1978, paper only).

In the same century, typhus was

first accurately described as a distinct disease. In his freewheeling “biography” of typhus, **Rats, Lice and History** (Atlantic-Little, Brown, 1935) microbiologist Hans Zinsser contends that typhus and its “brothers” (cholera, typhoid, and dysentery) have had a decided influence on history. Epidemics contributed to the Roman Empire's fall and the failure of the Great Crusades.

If diseases can affect politics, the reverse is also true. In **Cancer Crusade: The Story of the National Cancer Act of 1971** (Princeton, 1977), the Rand Corporation's Richard A. Rettig analyzes how the fight against disease becomes a political issue on Capitol Hill. As the 1972 presidential election drew near, both President Nixon and a potential rival, Senator Edward M. Kennedy (D.-Mass.), vied to become the acknowledged “patron” of the government's effort to cure cancer. The eventual result: a fivefold increase in federal spending on cancer research—and a recurrent debate over Congress's role in setting priorities in biomedical research.

John Fry, a British physician, argues that a nation's character is reflected in its health-care system, in **Medicine in Three Societies: A Comparison of Medical Care in the USSR, USA and UK** (American Elsevier, 1970). His conclusions: American free enterprise often turns doctors into entrepreneurs; the shrinking British economy depresses health-care standards; Soviet rigidity stifles innovation. (In Russia, it is estimated, doctors make less than factory workers and are held in low regard; 70 percent of Soviet M.D.s are women.)

The skyrocketing cost of health care is a dilemma in all developed nations. And government intervention, asserts Alan Maynard, a British

economist, does not seem to be the answer. Maynard coolly analyzes Western Europe's "socialized" health-care systems in **Health Care in the European Community** (Univ. of Pittsburgh, 1975). They range from inadequate (in Italy, the weakness of postwar governments has prevented a restructuring of the chaotic health-care system) to good (in Denmark, the poor have been treated for free since 1818).

A National Health Service (established in 1946) ensures that the poor of Britain are treated well; but it has produced a bureaucracy that can neither respond to doctors' needs for new technology nor pay salaries that keep up with inflation.

The United States as yet has no national health-insurance program, although numerous bills are currently under consideration in Congress. A concise description of each, compiled by the Senate Committee on Finance, is contained in **Comparison of Major Features of Health Insurance Proposals** (Government Printing Office, 1979).

Canada has had public health insurance for more than a decade. But

the Canadian Department of National Health and Welfare's influential **A New Perspective on the Health of Canadians** (Canadian Government, 1974) strongly urges people to help themselves: Improved health, concludes the study, will come not as a result of expensive technology, but only when people stop smoking, overeating, and drinking.

Among the radical environmentalists, Ivan Illich, an Austrian Catholic priest living in Mexico, goes furthest. In **Medical Nemesis: The Expropriation of Health** (Pantheon, 1976, cloth; Bantam, 1977, paper), he contends that we will never be "healthy" until we stop doctors from making us sick. Viewing modern medicine as "the seamy side of progress," Illich claims that today's drugs, over prescribed, numb people to "meaningful" suffering.

A more widely shared attitude is expressed by Lewis Thomas in his elegant **Lives of a Cell: Notes of a Biology Watcher** (Viking, 1974, cloth; Penguin, 1978, paper). What Thomas holds to be true was known before the time of Hippocrates: "Most things get better by themselves."

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EDITOR'S NOTE: *Titles in this essay were suggested by Dr. George A. Silver, professor of public health at the Yale University School of Medicine, and Dr. Abraham M. Lilienfeld, University Distinguished Service Professor at the Johns Hopkins University School of Hygiene and Public Health.*