

Health Care Past and Present

“Most Men Live Lives That Are Short, Nasty and Brutish”

—Thomas Hobbes

“Man that is born of woman is of few days and full of trouble. He cometh forth like a flower and is cut down. He fleeth also as a shadow and continueth not.”

—The Book of Job

Death before the nineteenth century was an ever-looming presence in our ancestors’ thoughts and a frequent visitor to their families. They feared it and had little control over it. Sudden death was as central to attitudes prior to the twentieth century as the cemetery was to every village and town. In disproportionate numbers, early death came to infants, but all ages and classes felt its sting in high proportion compared to modern times. In the 1640s, between one quarter and one third of all children of English peers and peasants died before the age of fifteen.¹

Bubonic plague in the fifteenth century and smallpox in the sixteenth century led the list of diseases. Dysentery and fever and intestinal worms were also mentioned by contemporary sources in 1745 England as common causes of infant mortality. Certainly, inadequate diet, especially the lack of milk until the late eighteenth century, played an important role, as did appalling ignorance of minimal personal and public hygiene. Polluted water and contaminated food were common. As late as the eighteenth century, towns still depended upon open ditches for latrines and refuse (such as the offal of butchers). Standing water from these ditches provided breeding grounds for mosquitoes and bacteria²which polluted wells and streams. In America, public health won reluctant acceptance only slowly and with much finger pointing. One of the earliest legislative reports on public health, in 1850, lamented “the sanitary evils arising from foreign emigration.”³ “Every man in whose veins courses any puritan blood, as he

looks back upon the events of the past, or forward to the hopes of the future, is appalled and astounded,"⁴ stated the report in a mix of nativism and factual understanding of the desperate plight of many newly arrived Americans. The report chronicled the rate of immigration and the levels of poverty, crime, immorality, and disease that members of the Massachusetts legislature associated with it. Concern for public consequences, however, did lead to a concern for public health that was new to Boston and that included education in sanitation, better constructed tenement buildings, and especially the construction of public bathing houses and wash houses for newcomers to the city who had no running water.

In our own age, adolescents are robust and healthy. That was not true prior to the nineteenth century. Infectious disease did not spare the young. After 1750, upper-class mortality rates were lower for those who had reached twenty-one years of age, presumably because they could afford to live in the countryside and escape plague in the towns, but infant mortality rates were high for all classes. Both lower and peer classes in England experienced very high mortality rates for children until the mid 1700s.

Death and Fatalism

The specter of death influenced family behavior and divorce. In an age where moralists lament that American divorce rates are the highest in recorded history, demographers like to point out that the American "durability" rate, or average period of married people remaining with the same spouse, is also the highest in recorded history. Prior to the twentieth century, divorce rates were low, not only as a function of moral principles and economic interdependence, but also as a function of high mortality among husbands and wives. In many cases, death rendered divorce moot.

Frequent death affected child rearing. Parents were more aloof from their children, anticipating childhood death and resigning themselves to it. Ironically, there is evidence that parental neglect itself was a major contributing factor to early death for children. In seventeenth- and eighteenth-century England, upper-class mothers customarily sent away their newborn infants to be reared by wet nurses, a practice that further reduced the survivability of their infants compared with upper-class infants who were kept at home.⁵ Fatalism and resignation toughened maternal attitudes. "Well, I only lost two out o' six babies, that's not so bad," wrote a nineteenth-century mother, thankful for her natal odds. Like this mother, parents tended to distance themselves from their children lest their frequent loss overwhelm them with grief. "Death, ain't you got no shame?" asked the old folk song, but the answer was already known.

Resignation and fatalism toward natural occurrences characterize pre-industrial societies, just as a sense of self-direction and control characterize

modern society. In 1964–66, while I was a Peace Corp volunteer in Liberia, West Africa, I experienced the fatalism of tribal farmers about the success or failure of rice harvests. I was assisting farmers convert from “slash-and-burn” methods to paddy rice. Rice production in cultivated paddies is greater than any yield from a rain forest that has been prepared by the slash-and-burn method. One farmer whose name was Joseph Sayone increased his yield from three bags of rice per acre to twenty per acre.

When he had harvested, I congratulated him. “Yeh,” he said, with no reference to the special seed we used, or to the laboriously constructed paddies he had built over the course of a year, or to the work of his wife. “God le’h me be able.” In his thoughts, it was God, not his year-long toil to build bunds, controlled water conduits, and restraining ponds for rainy season water, who produced the bumper crop. And his relatives agreed. They soon descended on his farm in large numbers and with many bowls, praising God for giving Joseph such a harvest. They, too, believed that providence or fate, not Joseph’s efforts, had provided the bounty, and as members of his extended family, they deserved to share in his good fortune. Within months, Sayone’s hard-won rice was consumed.

Modern societies have faith that they can control the future. A futurist orientation allows for savings, capital formation, long periods of education, and life-styles that deny instant gratification for future health. Preindustrial conditions do not reward such faith. Something like Sayone’s fatalism existed in all preindustrial societies. Uncontrollable natural or supernatural forces took away life, and one needed to reconcile one’s fate to the four horsemen of the apocalypse: disease, famine, pestilence, and drought.

The Triumph of Modern Health

The twentieth century represents perhaps the clearest triumph of science over fatalism and shameless death. If modern science cannot fulfill John Donne’s spiritual prophecy “death thou shall die . . .,” it can at least delay it, and make life more palatable in the balance. The modern hospital, the professionalism of physicians and nurses, and effective pharmaceuticals, have dramatically altered mortality rates and improved the quality of life in postindustrial states.

The Rise of the Modern Hospital

For those entering a hospital prior to 1900, the probability of treatment helping, rather than harming, would be less than fifty-fifty, and the odds would be considerably poorer prior to 1870. Today, we identify hospitals as technologic citadels of sophisticated medical practice. But their preindustrial origins were as religious and charitable institutions for the hopelessly sick and poor. They were places to comfort the indigent dying.

For the first three quarters of the nineteenth century, medical personnel were not in charge of hospitals. Early European hospitals did play a role in medical education and research, but both American and European physicians otherwise took little interest in hospital administration. Benjamin Rush, the founder of the Pennsylvania Hospital in Philadelphia in 1792, called hospitals "the sinks of human life in an army."⁶ In the main, hospitals at that time were places for the homeless poor and insane to die. The affluent classes were treated at home.

For a variety of reasons, however, hospitals became central to medical practice and education between 1870 and 1910.⁷ Paul Starr attributes the transformation to the demands of an industrializing capitalist society that brought large numbers of people into strange urban centers and away from rural areas, where families practiced "self-sufficiency" in caring for the sick. Advances in medical science also contributed since the hospital provided opportunities for specialization and technical competence that were not available to the family doctor practicing in patient homes. Specialization also meant a division of labor, and nursing during this period became a trained profession.

The Modern Nursing Profession

The development of the nursing profession accompanied the rapidly developing respect for hospital care. Nineteenth-century hospitals were long on charity, but short on cleanliness and ventilation. Florence Nightingale had demonstrated what improved hygiene could do when she reduced the death rate from 40 percent to 2 percent in British military hospitals in Scutari during the Crimean War. During the American Civil War, the Union maintained over 130,000 beds and treated more than a million soldiers using Nightingale's methods. Union hospitals had a mortality rate of only 8 percent. By 1873, three nurse training schools had been established, in Boston, New York, and New Haven.

Despite their contribution, the interests of the nursing profession have frequently clashed with those of the hospital and the physician. Prior to 1870, hospital nursing was a menial job given to women drawn from the ranks of the poor. Some were even conscripted from penitentiaries and almshouses. Both hospital administrators and physicians resisted the establishment of nursing schools and the employment of professional nurses in the hospital. The hospital preferred cheaper, untrained labor, and some physicians claimed that educated women would not be sufficiently obedient.⁸

Later in the nineteenth century, nurses tended to be older, poor, indigenous Americans. Susan Reverby⁹ points out that widowed women were often left penniless, without legal property or occupations. Comforting and caring were skills they had practiced all their lives, and nursing those in

homes for aged women and in charity hospitals offered a viable alternative to the almshouse. A sympathetic consideration from a druggist or physician that a woman could be employed as a reputable nurse, an ad in a local newspaper, or word-of-mouth recommendations were usually all the credentials necessary. Elderly women offered other advantages to institutions and private persons wishing to employ a nurse. They were usually widowed and devoted, even dependent, on their job. They also calmed fears over sexuality and contagion. Elderly women could look upon naked bodies, especially male, without the usual Victorian sensibilities, and their age provided more immunity to disease.

Consequently, nursing reforms were not driven by the hospital or physician profession. Like many social reforms of the period—Chicago's Hull House as a refuge for poor women and children and the development of the juvenile court are other examples—the movement for reform originated with upper-class women.¹⁰ Unlike the female nursing employees of hospitals, matrons such as Elizabeth Hobson were not social subordinates of physicians; they were the wives or daughters of powerful husbands or fathers. When opposed, they went over the heads of physicians to more powerful males of their own class. By the twentieth century, however, professional nursing and nurse training schools were located in hospitals and provided a source of cheap labor in the form of unpaid student nurses. Graduates of these schools usually entered private nursing until the depression era of the 1930s.¹¹

The Modern Physician

As we have seen, a physician's practice depended upon private paying patients who were treated at home. Hospitals were not used by physicians until late in the nineteenth century. Like nursing, however, the development of the medical profession parallels particular developments of the hospital. This is especially true of surgery, which enjoyed a dramatic increase of prestige and precision during this time. Technological advances played a major role in changing surgery. Before painkilling drugs, surgical methods in the first half of the nineteenth century depended upon powerful and swift physicians whose craft and tools were closer to the corner butcher. Mortality rates of about 40 percent followed amputation.²¹

Three developments altered the brutality and mortality rates and allowed abdominal surgery, which was rarely performed prior to 1890. Dentist William Morton's demonstration of ether at Massachusetts General Hospital in 1846 ushered in a means of eliminating pain and allowed more careful and delicate surgery.¹³ Joseph Lister's discovery of antiseptics in 1867 gradually led to new procedures during surgery to prevent infection. However, antiseptics was poorly understood. Lister's technique was based

on the use of carbolic acid spray, but his methods were adopted only over a long period of time.¹⁴ Fatal infections continued even after using the spray because antiseptic procedures were not followed carefully until after 1880. Soon, sterile procedures were properly followed and surgery rapidly expanded. Finally, the development of the X-ray in 1895, along with other diagnostic tools, opened the way for abdominal surgery for appendicitis, gallbladder, and stomach ulcers. Thoracic surgery and surgery of the nervous and cardiovascular systems developed in the early 1900s.

Triumph and Tragedy

By 1950, the cliché a “medical miracle” had rich meaning. Infant mortality rates in the United States were fewer than 15 per 100,000 births, down from 300 or so per 100,000 at the turn of the century. Pneumonia, once whispered by medical staff who witnessed the suffering of the dying to be the “old man’s relief,” now was easily controlled with penicillin. Infectious diseases in particular dramatically declined in the first half of the twentieth century. Improvement in health was a triumph of modernity, and part of that triumph was a consequence of modern medicine. There is, however, much debate about the weight of medicine’s contribution, compared to other modern factors.

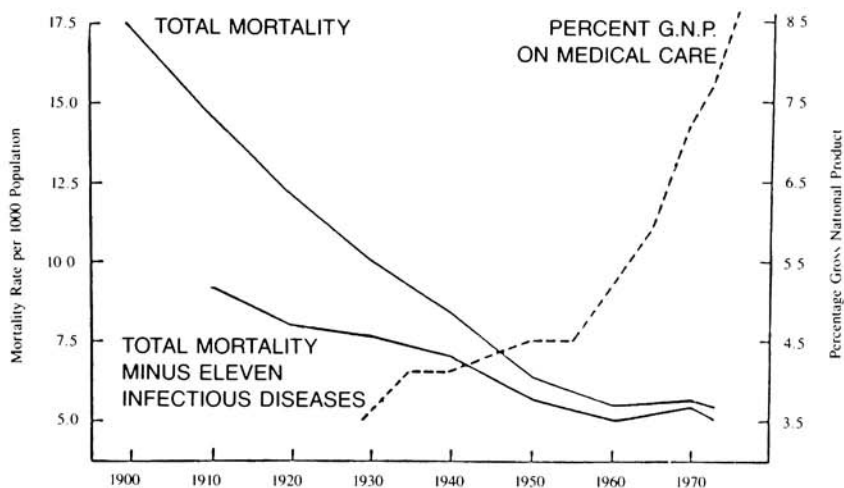
The principal index of any nation’s health is something statisticians call “age/sex specific mortality rates.” Age/sex specific mortality rates refer to deaths per age cohort, controlled by sex and cause of death. Without these controls mortality figures are meaningless. For example, if a population’s median age is high because disproportionately elderly, that population will have high mortality rates, in spite of adequate health and safety facilities. Such factors must be controlled if we are to have valid means of comparing mortality between regions, cultures, classes, or any other categories.

Insofar as “age/sex specific mortality rates” are concerned, the miracle of modern *medicine* is somewhat overstated or misunderstood. Our dramatic advances in health are also related to improved nutrition, life-style, and education, as well as to medical advancements. The literature of health care points, in particular, to seven hours of sleep (the actual amount necessary varies with age and individual), proper diet, minimal tension, absence of smoking or heavy drinking, daily exercise, and a life-style that provides low-risk factors for accidents. Advances in health and longevity are more closely tied to higher income, better diets, and especially greater education than to advances in medicine.

There are many important exceptions, of course. Pharmaceuticals have provided treatments at a very low price. Contrary to popular opinion,

FIGURE 1.1

AGE AND SEX ADJUSTED MORTALITY RATES FOR THE UNITED STATES, 1900-73, INCLUDING AND EXCLUDING ELEVEN MAJOR INFECTIOUS DISEASES, CONTRASTED WITH THE PROPORTION OF THE GNP EXPENDED ON MEDICAL CARE



increases in the costs of drugs have nearly always run behind increases in the consumer price index. In particular, chemotherapeutic drugs have had a dramatic effect on reducing death. Vaccines have also been important. Smallpox, polio, and whooping cough have been virtually eliminated.¹⁵

Many scholars take strong issue with the word "dramatic" as a description of the historical importance of chemotherapeutic agents. Figure 1.1 shows that a dramatic drop in deaths from infectious diseases did, indeed, occur in the twentieth century, but the success was not principally from drugs or vaccines. Advances in surgery also contributed to lower mortality rates. Surgical advances that permitted excising infections in the body's cavity by the twentieth century and modern surgical techniques, such as cardiovascular and tumor surgery, also qualify as triumphs of modern medicine. Neonatology represents still another success story, reducing infant mortality rates by technologically advanced methods that maintain life for prematurely born infants. For the most part, however, the distinction in age/sex/mortality rates for industrial countries and preindustrial countries in the Third World today are not related to curative medicine or to technological advancement. They are related to environment, nutrition, income, and education.

Yet, American perception of well-being is closely identified with medicine. Paradoxically, much of the public's present disenchantment with medicine is the consequence of this identification. Modern medicine has advanced to the frontiers of preserving life, but only by increasingly more expensive therapies and diagnoses to preserve life "on its margins." That is, additional expenditures and efforts to treat disease produce diminishing results in proportion to the effort. We are just beginning to learn that our scientific capacity to triumph over illness, physical anomalies, and death, on many occasions with medical miracles, brings with it a special brand of tragedy.

We have become totally modern. No more can we explain death and suffering as a consequence of fate. It is our medicine, or lack of it, that denies death and suffering. We know we must choose who receives scarce resources and who does not. No longer can we attribute to fate or to God the responsibility for making life-and-death decisions. Yet, these life-and-death decisions involve very expensive procedures and technologies and often contribute only marginally to extending life. Examples are well known and regularly make front-page newspaper drama: Organ transplants, aggressive treatment of terminal patients, neonates under 750 grams, or long-term comatose patients.

These new choices challenge our basic values and frequently produce conflict. In addition, when we are faced with health care budgets in excess of \$600 billion a year, the combination of health-care institutions that spend that money, competitive nonhealth care institutions that are denied that money and intense value conflict over life-and-death decisions, *will* inevitably generate bitter conflict. Conflict is father to politics and law, and politics determines who gets what, when, and how. Conflict also forces moral reassessment of traditional attitudes and postures, including the justice question: "Who *should* get what, when and how."

Summary

How do we distribute health care? How should we? How does political power within the present economic system determine the distribution of health care? These questions obviously spill over the boundaries of economics, politics, sociology, law, medicine, history, and philosophy. In particular, looming over the politics of health care is a sense of the tragic, as well as the majestic. Hence, the subtitle of this book. Tragedy points to human endeavors that are virtuous and honorable, yet carry the seeds of their own downfall. Our efforts to lessen the suffering and lengthen the lives of Americans through accessible, affordable, quality health care represent the best of our traditions and have been, on balance, an American

success story. Sometimes we fall short in that effort because some group is unreasonably left behind in the political shuffle. The thirty-seven million Americans who at the end of the 1980s had no health coverage represented such a group. At other times, our very success leads to exasperating dilemmas of bioethics and distributive justice that would cross the eyes of a Solomon. Our dilemma over public financing for costly organ transplants at the expense of other badly needed programs or continued aggressive treatment of comatose or terminally ill loved ones are poignant, modern examples. It is here where triumph merges with tragedy. This work is about our triumphs, our limitations, and our tragedies in health care policy.

Notes

1. Lawrence Stone. *The Family, Sex and Marriage In England 1500–1800* (New York: Harper & row, 1979) p. 55.

2. Stone, pp. 61–63.

3. Commissioners Sanitary Survey of the State. *Report of a General Plan for the Promotion of Public and Personal Health 1950*, reprinted by the Arno Press and The New York Times, 1972, p. 25.

4. *Sanitary Report*, p. 26.

5. Stone, p. 65.

6. Paul Starr, *The Social Transformation of American Medicine* (New York: Basic Books, 1982), p. 151.

7. Starr, pp. 147–162.

8. Stone, p. 155.

9. Susan Reverby. *Ordered to Care: The Dilemma of Nursing, 1850–1945* (Cambridge University Press, 1987), pp 16–21.

10. Elizabeth C. Hobson, *Recollections of a Happy Life* (New York: privately printed, 1914), pp. 77–114; the description of the ladies of the State Charities Aid Association comes from its first annual report, cited in M. Adelaide Nutting and Lavinia L. Dock, *A History of Nursing* (New York: Putnam, 1907), p. 370.

11. Reverby, Chapter 10.

12. Starr, p. 156.

13. James Bordley III, M.D., and A. McGehee Harvey, M.D. *Two Centuries of American Medicine*. (Philadelphia. W. B. Saunders Company, 1976), p. 79.

14. Bordley and McGehee, pp. 300–2.

15. John B. McKinlay and Sonja M. McKinlay, “The Questionable Contribution of Medical Measures to the Decline of Mortality in the United States in the Twentieth Century,” *Milbank Memorial Fund Quarterly: Health and Society* (1977) 55:419.