Part

The Healthcare System in the United States
Key Terms

- Acute infectious disease
- World Health Organization (WHO)
- Socioeconomic status (SES)
- Chronic illness
- Prevention
- Effects of expanded technology

Objectives

After studying this chapter the student should be able to:

1. Discuss the changes in health problems among the U.S. population during this century.
2. Identify expected future developments in the health of the population that will influence the healthcare professional.
3. Name five new medical technology advances in the United States.
4. Identify the role of the government in the expansion of health care.
This fifth edition differs in several respects from the first four editions because of the unfolding events stemming from the attacks on the World Trade Center in New York on September 11, 2001. This event not only altered our personal lives, but also changed our priorities in ways that we could never have anticipated.

Protecting U.S. citizens against physical, biochemical, and nuclear attacks and supporting U.S. military forces has become the number one priority. The United States will need to confront the complex issues regarding healthcare reform as soon as possible. With that premise, we begin the first chapter with a look back at healthcare issues and protocols developed in the last decade of the twentieth century. Much of the material from the fourth edition is still relevant. Updates to the succeeding chapters reflect changes and demographics anticipated for the twenty-first century, including changes in health care and health practitioner career choices.

A Look Back

Since the dawn of recorded history (and undoubtedly before), human beings have suffered sudden and devastating epidemics and diseases. In the United States in the second half of the nineteenth century, the most critical health problems were related to contaminated food and water, inadequate housing, and sewage disposal. A countrywide cholera epidemic and a yellow fever epidemic killed more than 30,000 Americans between 1853 and 1858.

By 1900, improving environmental conditions had brought infectious disease epidemics under control. Cities developed systems for safeguarding the milk, food, and water supply, and health departments began to expand, applying case findings and quarantines with good results. The pendulum of disease had swung away from acute infectious diseases and toward chronic conditions. Pneumonia, tuberculosis, heart disease, enteritis, diarrhea, and accidents were the major conditions requiring treatment in the 1900s.

The most important factor in the decline in mortality during the twentieth century was essential hygiene, supported by home and workplace improvements and attempts to improve the environment. Better hygiene accounts for approximately one-fifth of the reduction in mortality.

Improved nutrition also contributed to the falling death rate by increasing resistance to diseases. Lack of proper food and the resulting malnutrition had been largely responsible for the predominance of infectious diseases. Nutritional status remains a critical factor in a person’s response to infectious diseases, especially in young children. According to the World Health Organization (WHO), the best “vaccine” against common diseases is an adequate diet.

With epidemics behind them, the scientific community began working on better surgical techniques, new treatment methods, new tests to facilitate accurate diagnoses, and better treatment of individual diseases. The number of hospitals grew rapidly, and medical schools flourished.

Within a few years, medical care and patterns of disease had totally changed. The arrival of antibiotics in the 1940s signaled the end of the dominance of acute infectious disease and the ascendancy of chronic illnesses such as heart disease, stroke, and cancer as the conditions that account for two-thirds of the deaths in this country. Other conditions that significantly affect the quality of life are arthritis, arteriosclerosis, and blindness.
Medicine must now confront diseases and health problems that are to a large extent the result of environmental influences. Beginning in the 1980s, it became obvious that changed patterns of disease now threaten humanity. For example, acquired immune deficiency syndrome (AIDS), a combination of immune system defect, viral disease, and cancer, is one of the new chronic diseases challenging the medical community. Globalization and international travel increase the risk of exposure to infectious diseases such as avian flu and severe acute respiratory syndrome (SARS). For example, SARS, first reported in 2003 in Asia, spread to North and South America and other parts of Asia within a few months.

**A Look Forward**

Most diseases we confront today, whether physical or mental, are associated with personal lifestyle choices. Individuals can take responsibility for most of these, such as physical activity, eating habits, smoking, drinking alcoholic beverages, using illicit drugs, practicing personal hygiene, and so forth. Addressing these personal choices is more important for individual health than any measures society as a whole might take to protect itself from hazards and provide safe and essential foods.

The predominance of chronic illness as the major threat to health raises many issues for the future. Chronic illnesses related to genetics, lifestyle, and the environment will require a reexamination of methods of intervention. It is generally accepted that the chronic disease process begins long before the appearance of symptoms. This fact changes the approach to the planning and financing of health care. Since the exact date of the onset of a chronic disease cannot be pinpointed, the focus of treatment should be prevention. Prevention, directly related to major changes in lifestyle and personal habits, cannot be accomplished on a short-term basis. Many habits that accompany disease, such as heavy smoking, overeating, and excessive stress, are behavior patterns that cannot be changed with one-time activities, technology, or lectures.

The role of medical care in preventing sickness and premature death is secondary to that of other influences; yet healthcare funding is based on the premise that medical care plays the major role. The public concept of health is that intervention by the doctor and early discovery of disease will prevent or cure disease, when in fact health is determined mainly by the lifestyles people choose to follow.

Optimal treatment for chronic illness requires health care that is long-term and continuous—at present, health care in the United States is primarily short-term and intermittent. The funding of health care is a major reason for this. Although behavioral and environmental influences are the greatest contributors to poor health, healthcare funding regards surgery and drugs as core responses. Health insurance pays for treatment of acute diseases and for hospitalization, but the current method of financing health services emphasizes payment for specialized services, such as surgery or cardiac care, which reinforces the reliance on short-term, intermittent health care. Improved health care requires a redistribution of resources toward prevention of disease, care of the acutely ill who require immediate treatment, and ongoing care for those with chronic diseases.
It appears likely that disease patterns within the population will undergo other changes, creating new conditions that will require further alterations in service and intervention. Next, we consider the effects of expanded technology on the healthcare field.

Today, organ transplants, laser beam surgery, gene splicing, magnetic resonance imaging (MRI), and computerized axial tomography (CAT) are commonplace procedures. The continuing surge of technological advances is not without problems. Excessive cost remains a factor, one that affects the financial structure of the entire healthcare system. Salaries for the highly specialized personnel who operate the often costly equipment and interpret results can be overwhelming. These increased costs are visible in the form of higher health insurance premiums, costlier hospital stays, higher government payments to the system, and increases in total medical bills. This advanced technology has not only increased medical costs, but also created a social and ethical problem. Funding limits make advanced treatments unavailable to some people. The poor, who may need such treatments desperately, have no access to them.

This incredible growth of technology has affected all health professions. Students entering the health field today recognize that they must excel academically and master technical skills. Less time is spent learning personal, nontechnical aspects of care. This value system is reinforced by professionals, peers, administrators and by the general public. Excellent technical performance has become the standard, at the cost of the personal human touch.

The federal government plays an increasingly influential role in the direction of health care. It dominates the healthcare system by virtue of its expanding monetary support of technology and services, and because it sets the policies for provision of health care. As health services enter the twenty-first century, it becomes apparent that the social philosophy of the twentieth century is obsolete and we are moving toward a philosophy that holds society, through government, responsible for organizing and maintaining adequate health care for all people. Once considered an individual responsibility, health care is now considered a right to which everyone should have access.

In the next chapter, the various categories of health services now provided and maintained by public and private funding are explored. Because there is no single “U.S. Health care System,” the many ways in which health care is delivered may prove puzzling. This should not be surprising, given the historical perspective on health services, the diverse subsystems in operation in the United States, and the dynamics of social and technological change.

**Summary**

**Health Trends**

1. Leading causes of death in the United States in 2005 were heart disease, cancer, cerebrovascular accidents (CVA), chronic obstructive pulmonary disease (COPD), accidents, diabetes mellitus, Alzheimer's disease, pneumonia and flu, chronic kidney disease, and septicemia.

2. Mortality rates in the twentieth century showed a remarkable change: Death rates from infectious diseases declined significantly. Deaths from stroke and heart disease rose to epidemic proportions in the first half of the century but declined dramatically after 1950. Rates of lung and stomach cancer also decreased. Infectious diseases such as
tuberculosis and smallpox, also declined, along with infant and maternal mortality, presumably due to improved hygiene and immunization.

3. By 2005, life expectancy reached its highest level ever. The decline in death rates was especially notable among the young and old. The significant decrease in death rates among the elderly was presumably due to collaboration between medicine and public health in efforts to educate the public, especially about lifestyle changes, including personal hygiene, vaccinations, and social and environmental changes.

4. Approximately one-half of all deaths in the United States in 2005 occurred in people younger than age 75.

5. Over 50% of deaths in the United States are now related to behavior: diet and lifestyle, physical activity, tobacco and alcohol use, illicit use of drugs, motor vehicle accidents, toxic agents, and microbial agents.

6. Role of socioeconomic status (SES) on health: poverty, unemployment, homelessness, lack of education, race, ethnicity, social class, lack of access to care, and women’s issues.

7. Regarding homelessness: alcohol and substance abuse problems, lack of education and job skills, unemployment, mental and physical disabilities including chronic mental illness, lack of institutional support for those with severe mental illness, incarceration, and lack of low-cost housing.

8. The most prevalent mental illnesses are anxiety disorders and clinical depression. Direct costs related to medical care and indirect costs in loss of productivity total nearly 200 billion dollars a year in the United States.

Some Health Strategies for the Twenty-First Century

1. In the twenty-first century, strategies to improve health and healthcare access to everyone include the following: (1) create alliances across political boundaries/partnerships; (2) improve data sources to monitor the health of the patient population; (3) create task forces to monitor, report, and design interventions to address SES differences in health; and (4) reduce health disparities between rich and poor.

2. The Healthy People 2010 initiative (U.S. Department of Health and Human Services) has set objectives to address the issues of the twenty-first century: (1) implement advances in preventive therapies, vaccines, drugs, assistive technologies, and computerized systems; (2) change how medicine is practiced; (3) broaden prevention and the science base. These broad approaches should increase the healthy lifespan and afford health protection, promotion, and prevention.

These objectives will affect all health professionals and change the practice of medicine as we know it.