

## CHAPTER FOCUS

### Classical Era

#### The Greeks and Health

#### Roman Era

#### Middle Ages

Black Death

The “Witch Craze” of the Early Middle Ages

#### The Renaissance

#### The Emergence of Home Visiting

#### The Reformation

#### The Advancement of Science and Health of the Public

#### The Dark Period of Nursing

#### Early Organized Health Care in the Americas: A Brave New World

The Chadwick Report and the Shattuck Report

#### The Industrial Revolution

#### John Snow and the Science of Epidemiology

#### And Then There Was Nightingale . . .

The Crimean Experience: “I Can Stand Out the War with Any Man”

Florence Nightingale and Sanitation

#### Returning Home a Heroine: The Political Reformer

Nightingale and Military Reforms

The Nightingale School at St. Thomas: The Birth of Professional Nursing

Taking Health Care to the Community: Nightingale and Wellness

Nightingale’s Legacy

#### Early Nursing Education and Organization in the United States

#### The Evolution of Nursing in the United States: The First Century of Professional Nursing

#### The Emergence of Community and Public Health Nursing

Lillian Wald, Public Health Nursing, and Community Activism

Dorothea Lynde Dix

Clara Barton

Birth of the Midwife in the United States

The Nursing Profession Responds to the Great Depression and World War II

Early Education and Standardization of Practice of Public Health Nursing

Challenges of the 1930s

Progressive Initiatives After the War Years

Social and Political Influence of the 1960s and 1970s

Public Health Nursing Services in the 1980s and 1990s

#### Science and Health Care, 1945–1960: Decades of Change

#### Years of Revolution, Protest, and the New Order, 1961–2000

#### Managed Care and Healthcare Reform: First Decades of the 21st Century

#### The Patient Protection and Affordable Care Act (ACA) of 2010

## QUESTIONS TO CONSIDER

After reading this chapter, you will know the answers to the following questions:

1. When did humans first begin thinking about the causes of illness?
2. What were the contributions of the Greeks and Egyptians to our health practices today?
3. What are the origins of public health?
4. Who did the first home visits?
5. What were major health concerns of the Middle Ages?
6. What were Florence Nightingale’s contributions to nursing as a profession?
7. What was the Chadwick Report, and why is it significant to community health nursing?
8. What role did William Rathbone play in the evolution of community health nursing?
9. Who is Lillian Wald, and why is she considered a prominent figure in the development of community health nursing in the United States?
10. What led to early standardization of public health nursing practice in the United States?
11. What are the major legislative events, discoveries, and inventions that have improved the health status of populations and communities?
12. What is the Patient Protection and Affordable Care Act of 2010 (ACA, or “Obamacare”) and why is this healthcare reform legislation considered one of the most significant federal mandates for public and community health in the history of the United States?

## CHAPTER 3

# History of Community and Public Health Nursing

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### KEY TERMS

*American Journal of Nursing (AJN)*  
American Nurses Association (ANA)  
Clara Barton  
Black Death (bubonic plague)  
Frances Payne Bolton  
Mary Breckenridge  
Mary Brewster  
Cadet Nurse Corps  
case management  
deaconesses  
Jane A. Delano  
Dorothea Lynde Dix  
Lavinia Lloyd Dock  
Frontier Nursing Service

Goldmark Report  
Annie Goodrich  
Greek era  
health visiting  
Henry Street Settlement  
Edward Jenner  
Kaiserwerth Institute  
Edwin Klebs  
Robert Koch  
Joseph Lister  
managed care  
Nightingale School of Nursing  
at St. Thomas  
*Nursing's Agenda for Health Care Reform*

Louis Pasteur  
Patient Protection and Affordable  
Care Act of 2010  
William Rathbone  
Reformation  
Isabel Hampton Robb  
Roman era  
Margaret Sanger  
Jessie Sleet Scales  
Saint Vincent de Paul  
Elizabeth Tyler  
Lillian Wald

## REFLECTIONS

**W**hat do you know about the history of health care and the role of nursing in health prevention and promotion? How do you define healing and healers as related to human history? How do you think Florence Nightingale would react if she were alive today regarding nursing, healing, and health care?

**F**or as long as humanity has existed, so have the nursing of the sick and community attempts to prevent illness. Health practices of early humans most likely evolved as a way for groups to survive. Many of these early causal links between humans and their environment were attributed to superstition and religion. Evidence from our earliest human ancestors suggests that techniques such as mind-body connections (e.g., voodoo, alchemy, and/or spells), isolation, migratory patterns, and/or societal estrangement of those community members who were defined by the group as sick were used to manage disease and protect the health of the community (Hanlon & Pickett, 1984).

## Classical Era

More than 4,000 years ago, Egyptian physicians and nurses used an abundant pharmacological repertoire to cure the ill and injured. The Ebers Papyrus lists more than 700 remedies for ailments from snake bites to puerperal fever. The Kahun Papyrus (circa 1850 B.C.) identified suppositories (e.g., crocodile feces) that could be used for contraception (Kalisch & Kalisch, 1986).

Healing appeared in the Egyptian culture as the successful result of a contest between invisible beings of good and evil (Shryock, 1959). The physician was not a shaman; instead, there was specialization and separation of function, with physicians, priests, and sorcerers all practicing separately and independently. Some patients would consult the physician, some visited the shaman, and others sought healing from magical formulas. Many tried all three approaches. The Egyptians, quite notably, did not accept illness and death as inevitable but rather believed that life could be indefinitely prolonged.

Because Egyptians blended medicine and magic, the concoctions believed to be the most effective were often bizarre and repulsive by today's standards. For example, lizard's blood, swine's ears and teeth, putrid meat and fat, tortoise brains, the milk of a lactating woman, the urine of a chaste woman, and excreta of donkeys and lions were frequently used ingredients. At least some explanation for these odd ingredients can be found in the following:

These pharmacological mixtures were intended to sicken and drive out the intruding demon, which was thought to cause the disease. Drugs containing fecal matter were in fact used until the end of the eighteenth

century in Europe as common practice. (Kalisch & Kalisch, 1986)

As early as 3000 to 1400 B.C., the Minoans created ways to flush water and construct drainage systems. Circa 1000 B.C., the Egyptians constructed elaborate drainage systems, developed pharmaceutical herbs and preparations, and embalmed the dead. The Hebrews formulated an elaborate hygiene code that dealt with laws governing both personal and community hygiene, such as contagion, disinfection, and sanitation through the preparation of food and water. Hebrews, although few in number, exercised great influence in the development of religious and health doctrine. According to Bullough and Bullough (1978), most of their genius was religious, giving birth to both Christianity and Islam. The Jewish contribution to public health is greater in sanitation than in their concept of disease. Garbage and excreta were disposed of outside the city or camp, infectious diseases were quarantined, spitting was outlawed as unhygienic, and bodily cleanliness became a prerequisite for moral purity. Although many of the Hebrew ideas about hygiene were Egyptian in origin, Moses and the Hebrews were the first to codify them and link them with spiritual godliness. Their notion of disease was rooted in the "disease as God's punishment for sin" idea.

The civilization that grew up between the Tigris and Euphrates Rivers is known geographically as Mesopotamia (modern Iraq) and includes the Sumerians. Disease and disability in the Mesopotamian area, at least in the earlier period, was considered a great curse, a divine punishment for grievous acts against the gods. Having such a curse of illness resulting from sin did not exactly put the sick person in a valued status in the society. Experiencing illness as punishment for a sin linked the sick person to anything even remotely deviant: Such things as murder, perjury, adultery, or drunkenness could be the identified sins. Not only was the person suffering from the illness, but he or she was also branded by society as having deserved it. The illness made the sin apparent to all; the sick person was isolated and disgraced. Those who obeyed divine law lived in health and happiness. Those who transgressed the law were punished, with illness and suffering thought to be consequences. The sick person then had to make atonement for the sins, enlist a priest or other spiritual healer to lift the spell or curse, or live with the illness to its

ultimate outcome. In simple terms, the person had to get right with the gods or live with the consequences (Bullough & Bullough, 1978). Nursing care by a family member or relative would be needed in any case, regardless of the outcome of the sin/curse/disease–atonement/recovery or death cycle. This logic became the basis for explanation of why some people get sick and some don't for many centuries, and it still persists to some degree in most cultures today (Achterberg, 1990).

I have an almost complete disregard of precedent and a faith in the possibility of something better. It irritates me to be told how things always have been done . . . I defy the tyranny of precedent. I cannot afford the luxury of a closed mind. I go for anything new that might improve the past.

You must never so much as think whether you like it or not, whether it is bearable or not; you must never think of anything except the need, and how to meet it.

—Clara Barton, *Civil War nurse and founder of the American Red Cross*

## The Greeks and Health

In Greek mythology, the god of medicine, Asclepius, cured disease. One of his daughters, Hygeia, from whose name we derive the word “hygiene,” was the goddess of preventive health and protected humans from disease. Panacea, Asclepius's other daughter, was known as the all-healing “universal remedy”; today her name is used to describe any ultimate “cure-all” in medicine. Panacea was known as the “light” of the day, and her name was invoked and shrines built to her during times of epidemics (Brooke, 1997).

During the **Greek era**, Hippocrates emphasized the rational treatment of sickness as a natural, rather than god-inflicted, phenomenon. Hippocrates of Cos (460–370 B.C.) is considered the father of medicine because of his arrangements of the oral and written remedies and diseases, which had long been secrets held by priests and religious healers, into a textbook of medicine that was used for centuries (Bullough & Bullough, 1978). Hippocrates's contribution to the science of public health was his recognition that making accurate observations of and drawing general conclusions from actual phenomena formed the basis of sound medical reasoning (Shryock, 1959).

In Greek society, health was considered to result from a balance between mind and body. Hippocrates wrote a most important book, *Air, Water and Places*, which detailed the relationship between humans and the environment. It is

considered a milestone in the eventual development of the science of epidemiology as the first such treatise on the connectedness of the web of life. This topic of the relationship between humans and their environment did not reoccur until the development of bacteriology in the late nineteenth century (Fromkin, 1998; Rosen, 1958).

Perhaps the idea that most damaged the practice and scientific theory of medicine and health for centuries was the doctrine of the four humors, first spoken of by Empedocles of Acragas (493–433 B.C.). Empedocles was a philosopher and a physician, and as a result, he synthesized his cosmological ideas into his medical theory. He believed that the same four elements (or “roots of things”) made up the universe and were found in humans and in all animate beings (Bullough & Bullough, 1978). Empedocles believed that each human was a microcosm, a small world within the macrocosm, or external environment. The four humors of the body (blood, bile, phlegm, and black bile) corresponded to the four elements of the larger world (fire, air, water, and earth) (Kalisch & Kalisch, 1986). Depending on the prevailing humor, a person was sanguine, choleric, phlegmatic, or melancholic.

Because of this strongly held and persistent belief in the connection between the balance of the four humors and health status, treatment was aimed at restoring the appropriate balance of the four humors through the control of their corresponding elements. By manipulating the two sets of opposite qualities—hot and cold, wet and dry—balance was the goal of the intervention. Fire was hot and dry, air was hot and wet, water was cold and wet, and earth was cold and dry. For example, if a person had a fever, cold compresses would be prescribed for a chill and the person would be warmed. Such doctrine gave rise to faulty and ineffective treatment of disease that influenced medical education for many years (Taylor, 1922).

Plato, in *The Republic*, detailed the importance of recreation, a balanced mind and body, nutrition, and exercise. A distinction was made among gender, class, and health as early as the Greek era; that is, only males of the aristocracy could afford the luxury of maintaining a healthful lifestyle (Rosen, 1958).

In *The Iliad*, Homer's poem about the attempts to capture Troy and rescue Helen from her lover Paris, 140 different wounds are described. The mortality rate averaged 77.6%, with the highest mortality resulting from sword and spear thrusts and the lowest mortality resulting from superficial arrow wounds. There was considerable need for nursing care, and Achilles, Patroclus, and other princes often acted as nurses to the injured. The early stages of Greek medicine reflected the influences of Egyptian, Babylonian, and Hebrew medicine. Therefore, good medical and nursing techniques were used to treat these



war wounds: The arrow was drawn or cut out, the wound washed, soothing herbs applied, and the wound bandaged. However, in sickness in which no wound occurred, an evil spirit was considered the cause. For example, the cause of the plague was unknown, so the question became how and why affected soldiers had angered the gods. According to *The Iliad*, the true healer of the plague was the prophet who prayed for Apollo to stop shooting the “plague arrows.” The Greeks applied rational causes and cures to external injuries, while internal ailments continued to be linked to spiritual maladies (Bullough & Bullough, 1978).

## Roman Era

During the rise and the fall of the **Roman era** (31 B.C.–A.D. 476), Greek culture continued to be a strong influence. The Romans easily adopted Greek culture and expanded the Greeks’ accomplishments, especially in the fields of engineering, law, and government. The development of policy, law, and protection of the public’s health was an important precursor to our modern public health systems (Fromkin, 1998; Rosen, 1958). For Romans, the government had an obligation to protect its citizens, not only from outside aggression such as warring neighbors, but also from inside the civilization in the form of health laws. According to Bullough and Bullough (1978), Rome was essentially a “Greek cultural colony” (p. 20).

During the 3rd century B.C., Rome began to dominate the Mediterranean, Egypt, the Tigris–Euphrates Valley, the Hebrews, and the Greeks (Boorstin, 1985). Greek science and Roman engineering then spread throughout the ancient world, providing a synthesized Greco-Roman foundation for eventual public health policies (Bullough & Bullough, 1978).

Galen of Pergamum (A.D. 129–199), often known as the greatest Greek physician after Hippocrates, left for Rome after studying medicine in Greece and Egypt and gained great fame as a medical practitioner, lecturer, and experimenter. In his lifetime, medicine evolved into a science; he submitted traditional healing practices to experimentation and was possibly the greatest medical researcher before the 17th century (Bullough & Bullough, 1978). Galen was considered the last of the great physicians of antiquity (Kalisch & Kalisch, 1986).

The Greek physicians and healers certainly made the most contributions to medicine, but the Romans surpassed the Greeks in promoting the evolution of nursing. Roman armies developed the notion of a mobile war nursing unit as their battles took them too far from home to be cared for by their wives and family. This portable hospital was a series of tents arranged in corridors; as battles wore on, these tents gave way to buildings that became permanent

convalescent camps along the battle sites (Rosen, 1958). Many of these early military hospitals have been excavated by archaeologists along the banks of the Rhine and Danube Rivers. They had wards, recreation areas, baths, pharmacies, and even rooms for officers who needed a “rest cure” (Bullough & Bullough, 1978). Coexisting were the Greek dispensary forms of temples (*iatreia*), which started out as a type of physician waiting room. These eventually developed into a primitive type of hospital—that is, places for surgical patients to stay until they could be taken home by their families. Although nurses during the Roman era were usually family members, servants, or slaves, nursing had strengthened its position in medical care and emerged during the Roman era as a separate and distinct specialty (Minkowski, 1992).

During this era, the Romans developed massive aqueducts, bath houses, and sewer systems. Even though these engineering feats were remarkable at the time, poorer and less fortunate residents often did not benefit from the same level of public health amenities, such as sewer systems and latrines (Bullough & Bullough, 1978). However, the Romans did provide many of their citizens with what we would consider public health services.

### NOTE THIS!

**D**id you know that engineers during the Roman era developed an aqueduct system capable of providing 40 gallons of water per person per day to Rome’s 1 million residents, comparable to our consumption rates today?



## Middle Ages

The Middle Ages, or the medieval era, served as a transition between ancient and modern civilizations. The medical knowledge of the Greeks and Romans was preserved and expanded in the Islamic world, which underwent a “Golden Age” at this time but disappeared in Europe after the decline of the Roman Empire (476–1453 A.D.). While 9th- and 10th-century Muslim physicians such as Al-Razi, or Rhazes (841–926 A.D.), and Ibn-Sina, known as Avicenna (980–1037 A.D.), were developing the

foundations of modern pharmacology in Persia, in Europe medicine was experiencing a reversal. Once again, myth, magic, and religion were explanations and cures for illness and health problems. For Europeans, the medieval world was the result of fusion among three streams of thought, actions, and ways of life—Greco-Roman, Germanic, and Christian—into one (Donahue, 1985).

### CULTURAL CONNECTION

During the Early Middle Ages, Europeans seldom washed or changed their clothes more than once or twice a year. This lack of personal sanitation set up ideal conditions for the bubonic plague where one out of three faces disappeared from these human communities.

Source: Kelly, J. (2005). *The great mortality: An intimate history of the Black Death, the most devastating plague of all time*. New York, NY: HarperCollins.

Nursing was most influenced by Christianity with the beginning of **deaconesses**, or female servants, doing the work of God by ministering to the needs of others. Deacons in the early Christian churches were apparently available only to care for men; deaconesses cared only for the needs of the women. This role of the deaconess in the church was considered a forward step in the development of nursing, and in the 19th century it would strongly influence the young Florence Nightingale.

During this era, Roman military hospitals were replaced by civilian ones. In early Christianity, the *diakonia*, a kind of combination outpatient and welfare office, was managed by deacons and deaconesses and served as the equivalent of a hospital. Jesus served as the example of charity and compassion for the poor and marginal of society.

Communicable diseases were rampant during the Middle Ages, primarily because of the walled cities that emerged in response to the paranoia and isolation of the populations. Infection was next to impossible to control. Physicians had little to offer, deferring to the church for management of disease. Nursing roles were carried out primarily by religious orders. The oldest hospital (other than military hospitals in the Roman era) in Europe was most likely the Hôtel-Dieu in Lyons, France, founded in about 542 by Childbert I, king of France. The Hôtel-Dieu in Paris was founded in about 652 by St. Landry, bishop of Paris.

During the Middle Ages, charitable institutions, hospitals, and medical schools increased in number, with the religious leaders as caregivers. The word “hospital” which derives from the Latin *hospitalis*, meaning “service of guests,” was most likely used for a shelter for travelers

and other pilgrims as well as the occasional person who needed extra care (Kalisch & Kalisch, 1986). Early European hospitals were more like hospices or homes for the aged, sick pilgrims, or orphans. Nurses in these early hospitals were religious deaconesses who chose to care for others in a life of servitude and spiritual sacrifice (Minkowski, 1992).

### Black Death

During the Middle Ages, a series of horrible epidemics, including the **Black Death (bubonic plague)**, ravaged the civilized world (Diamond, 1997; Fromkin, 1998). In the 14th century, Europe, Asia, and Africa saw nearly half their populations lost to the bubonic plague. According to Bullough and Bullough (1978), an interesting account of the arrival of the bubonic plague in 1347 claims that the disease had started in the Genoese colony of Kaffa in the Crimea. The story passed down through the ages was that the city was being besieged by a Mongol khan. When the disease broke out among the khan’s men, he catapulted the bodies of its victims into Kaffa to infect and weaken his enemies. The soldiers and colonists of Kaffa then carried the disease back to Genoa.

### THINK ABOUT THIS

The Pima Indians of the American Southwest referred to the plague as *oimmeddam* or “wandering sickness.” Below is an ancient Indian legend that describes the horror of their ancestors suffering from *oimmeddam*.

“Where do you come from?” an Indian asks a tall, black-haired stranger.

“I come from far way,” the stranger replies, “from . . . across the Eastern Ocean.”

“What do you bring?” the Indian asks.

“I bring death,” the stranger answers. “My breath causes children to wither and die like young plants in the spring snow. I bring destruction. No matter how beautiful a woman, once she has looked at me, she becomes as ugly as death. And to men, I bring not death alone, but the destruction of their children and the blighting of their wives. . . . No people who look upon me are ever the same.”

Worldwide, more than 60 million deaths were eventually attributed to this horrible plague. In some parts of Europe, only one-fourth of the population survived, with some places having too few people to bury the dead. Families abandoned sick children, and the sick were often left to die alone (Cartwright, 1972).

Nurses and physicians were powerless to avert the disease. Black spots and tumors on the skin appeared,

and petechiae and hemorrhages gave the skin a darkened appearance. There was also acute inflammation of the lungs, burning sensations, unquenchable thirst, and inflammation of the entire body. Hardly anyone afflicted survived the third day of the attack. So great was the fear of contagion that ships were set to sail with bodies of infected persons without a crew, drifting through the North, Black, and Mediterranean seas from port to port with their dead passengers (Cohen, 1989). Bubonic plague is caused by the bacillus *Pasteurella pestis*, which is usually transmitted by the bite of a flea carried by an animal vector, typically a rat. After the initial flea bite, the infection spreads through the lymph nodes, and the nodes swell to enormous size; the inflamed nodes are called bubos, from which the bubonic plague derives its name. Medieval people knew that this disease was in some way communicable, but they were unsure of the mode of transmission (Diamond, 1997)—hence the avoidance of victims and a reliance on isolation techniques. The practice of quarantine in city ports was developed as a preventive measure and is still used today (Bullough & Bullough, 1978; Kalisch & Kalisch, 1986).

### ETHICAL CONNECTION



The Gallup Poll organization named nursing as the most “ethical” profession in the United States in 2013, according to a survey of American adults. More than 80% of respondents categorized nurses as having very high or high ethics. Nursing has been ranked the number one most ethical profession during the last 10 years, passed only in 2001 by fire fighters in the wake of the 9/11 terrorist attacks.

The plague had far-reaching social and religious consequences. The authority of the Catholic Church was weakened, due to the inability of priests to halt the disease and protect their parishioners from the Black Death, which was commonly assumed to be God’s vengeance for the sins of humans. Although dreadful and terrifying, the plague brought about radical societal changes through the drop in value of land, due to a reduction in workers, thus raising the price of labor and ultimately ending Europe’s feudal system (Fromkin, 1998).

### The “Witch Craze” of the Early Middle Ages

As respected “wise women” through the centuries, during the Middle Ages midwives and women healers gradually transformed into members of a “demonized” avocation. As formal training in medicine gradually developed in Europe, leaders of the church and officials at the time restricted such education to men only, consequently creating a legal male monopoly of the practice of medicine and

healing (Achterberg, 1990; Barstow, 1994; Briggs, 1996). As women found themselves “ineligible” to practice in their roles as healers, they faced an even greater threat as they were labeled as witches.

A revival of the Holy Inquisition, a body formed in France in 1022 and codified by the Catholic Church in the 1486 *Malleus maleficarum* (Hammer of Witches) by Pope Innocent VIII, allowed the persecutions to take form. By formalizing the legal punishment of witches and midwives, the Pope codified this “step-by-step, how-to manual” for dealing with the witch problem. Achterberg (1990) describes this significant endorsement in this way: “We are dealing here with an evil that surpasses rational understanding. Here was, indeed, the worst aberration of humanity and it trickled down the hierarchy of authority” (p. 86). The legal system throughout Europe became increasingly harsh with each new conviction, and as the distinction between sorcery and heresy was further blurred, those accused of witchcraft and heresy were found guilty of devil worship. With the support of both the church and civil authorities, as many as 250,000 women were accused, “tried,” and tortured into making confessions and eventually burned at the stake simply for being women healers (Briggs, 1996). The accusers linked women’s special healing “powers” to an alliance with Satan, and over three centuries they punished and eliminated women as perceived threats to their medical supremacy in society.

Our stereotype of a witch today reflects these ancient and deadly associations of women healers and evil magic: the elderly, unattractive woman dressed in black on a broomstick with a black cat at her side. Women in Europe who practiced as healers often used empirically sound herbal and alternative health practices (hence the caldron association), provided gynecological and obstetric care of women at all hours (hence the broom, because proper women did not go out at night and were presumed to “fly”), and relied on other women for advice and shared practices of healing (hence the “coven” association; Achterberg, 1990; Barstow, 1994). As described by Briggs (1996), “To this end they have allegedly flown by night to meetings where orgiastic, blasphemous or cannibalistic rituals symbolized their defection from social and personal virtue” (p. 4).

Briggs (1996) estimates that 100,000 trials of witches occurred in Europe between the years 1450 and 1750, with at least 50% of the accused being executed in brutal hangings and burnings. This “witch craze” reached its height during the 12th through 14th centuries in France, Germany, and other European countries (Achterberg, 1990; Barstow, 1994; Briggs, 1996). Religion, magic, healing, and witchcraft were inextricably linked throughout human history, but during this era dramatic changes



in cultural values and paranoia about women's perceived powers resulted in a mass cultural movement to eliminate women as healers (Briggs, 1996; Minkowski, 1992).

## The Renaissance

During the rebirth of Europe, great political, social, and economic advances occurred along with a tremendous revival of learning. Donahue (1985) contends that the Renaissance has been “viewed as both a blessing and a curse” (p. 188). There was a renewed interest in the arts and sciences, which helped advance medical science (Boorstin, 1985; Bullough & Bullough, 1978). Columbus and other explorers discovered new worlds, and belief in a sun-centered rather than earth-centered universe was promoted by Copernicus (1473–1543); Sir Isaac Newton's (1642–1727) theory of gravity changed the world forever. Gunpowder was introduced, and social and religious upheavals resulted in the American and French revolutions at the end of the 18th century (Weiner, 1993).

In the arts and sciences, Leonardo da Vinci, known as one of the greatest geniuses of all time, made a number of anatomical drawings based on dissection experiences. These drawings have become classics in the progression of knowledge about the human anatomy. Many artists of this time left an indelible mark and continue to exert influence today, including Michelangelo, Raphael, and Titian (Donahue, 1985; Minkowski, 1992; Weiner, 1993).

## The Emergence of Home Visiting

In 1633, **Saint Vincent de Paul** founded the Sisters of Charity in France, an order of nuns who traveled from home to home visiting the sick. As the services of the sisters grew, St. Vincent appointed Mademoiselle Le Gras as supervisor of these visitors. These nurses functioned as the first organized visiting nurse service, making home visits and caring for the sick in their homes. De Paul believed that for family members to go to the hospital was disruptive to family life and that taking nursing services to the home enabled health to be restored more effectively and more efficiently (Weiner, 1993).

## The Reformation

Religious changes during the Renaissance were to influence nursing perhaps more than any other aspect of society. Particularly important was the rise of Protestantism as a result of the reform movements of Martin Luther (1483–1546) in Germany and John Calvin (1509–1564) in France and Geneva, Switzerland. Although the various sects were numerous in the Protestant movement,

the agreement among the leaders was almost unanimous on the abolition of the monastic or cloistered career. The effects on nursing were drastic: Monastic-affiliated institutions, including hospitals and schools, were closed, and orders of nuns, including nurses, were dissolved. Even in countries where Catholicism flourished, seizures of monasteries by royal leaders occurred frequently.

Religious leaders, such as Martin Luther in Germany, who led the **Reformation** in 1517, were well aware of the lack of adequate nursing care as a result of these sweeping changes. Luther advocated that each town establish something akin to a “community chest” to raise funds for hospitals and nurse visitors for the poor (Dietz & Lehozky, 1963; Fromkin, 1998). For example, in England, where there had been at least 450 charitable foundations before the Reformation, only a few survived the reign of Henry VIII, who closed most of the monastic hospitals (Donahue, 1985). Eventually, Henry VIII's son, Edward VI, who reigned from 1547 to 1553, was convinced and did endow some hospitals—namely St. Bartholomew's Hospital and St. Thomas's Hospital, which would eventually house the Nightingale School of Nursing in the 19th century (Bullough & Bullough, 1978).

### GOT AN ALTERNATIVE?

Ehrenreich and English (1973), in their seminal work, *Witches, Midwives, and Nurses: A History of Women Healers*, note that in the Middle Ages it was the women who were testing new herbs and innovative ways of healing, leading to the adoption of humane, empirical paradigms of healing. All the while, they contend, their male counterparts clung to their ritualistic and outdated procedures, such as leeching, use of mercury, and purgation.

These authors contend that the witch craze, where thousands of women were tried and put to death, was a ruling-class campaign of terror against the female peasant healers who dared to introduce what is now considered holistic or complementary healing modalities. Given that God considered illness and suffering as payment for sin, anyone who offered healing interventions, such as boiling up herbs and potions in big pots, must be anti-God and, therefore, must be working for the “other side” or the Devil. It is hardly surprising, according to Ehrenreich and English, that nursing fell into disrepute by the 18th century, and that the only women who had any status for being involved in healing were those in holy orders. Yet for many poor people, their only remedies were these traditional healing “potions.” As medicine grew with scientific models of illness management, these tried and tested remedies were held up as “old wives’ tales.”

Source: Ehrenreich, B., & English, D. (1973). *Witches, midwives, and nurses: A history of women healers*. Old Westbury, NY: Feminist Press.



## The Advancement of Science and Health of the Public

It took the first 50 years of the 18th century for the new knowledge from the Enlightenment to be organized and digested, according to Donahue (1985). In Great Britain, **Edward Jenner** discovered an effective method of vaccination against the dreaded smallpox virus in 1798. Psychiatry developed as a separate branch of medicine, and instruments such as the pulse watch and the stethoscope were invented that measured and allowed for assessment of the body.

One of the greatest scientists of this period was **Louis Pasteur** (1822–1895). A French chemist, Pasteur first became interested in pathogenic organisms through his studies of the diseases of wine. His discovery, that heating wine to a temperature of 55° to 60°C killed the microorganisms that spoiled wine, was critical to the wine industry's success in France. This process of pasteurization led Pasteur to investigate many fields and save many lives from contaminated milk and food.

**Joseph Lister** (1827–1912) was a physician who set out to decrease the mortality resulting from infection after surgery. He used Pasteur's research to eventually arrive at a chemical antiseptic solution of carbolic acid for use in surgery. Widely regarded as the father of modern surgery, he practiced his antiseptic surgery with great results, and the Listerian principles of asepsis changed the way physicians and nurses practice to this day (Dietz & Lehozky, 1963).

**Robert Koch** (1843–1910), a physician known for his research in anthrax, is regarded as the father of microbiology. By identifying the organism that caused cholera, *Vibrio cholerae*, he also demonstrated its transmission by water, food, and clothing.

**Edwin Klebs** (1834–1913) proved the germ theory—that is, that germs are the causes of infectious diseases. This discovery of the bacterial origin of diseases may be considered the greatest achievement of the 19th century. Although the microscope had been around for two centuries, it remained for Lister, Pasteur, and Koch—and ultimately Klebs—to provide the missing link (Dietz & Lehozky, 1963; Fromkin, 1998; Rosen, 1958).

### MEDIA MOMENT



#### Troy (2004)

This movie starring Brad Pitt as Achilles is based on the epic poem *The Iliad* by Homer. The movie recounts the legend of the Trojan War, as the fortress city is attacked by a Greek army led by Menelaus of Sparta and Agamemnon of Mycenae.

Achilles, the mighty Greek warrior, had been dipped as an infant by his mother in the River Styx so that he would be invincible to iron weapons. Because his mother had held him by his heel, this was the only vulnerable part of his body. In the adaptation of Homer's *Iliad*, the Trojan warrior Paris (played by Orlando Bloom) shoots Achilles in the heel with a poison arrow and brings about his death. A simple superficial wound to the heel would not have been deadly; consequently, history provides us with an early account of biochemical warfare.

Source: Peterson, W. (Producer & Director). (2004). *Troy*. United States: Warner Bros.

### NOTE THIS!

The Reformation had a devastating effect upon nursing. Imagine our situation in the United States if a decree went out that hospitals would be closed in 2 years. There would be no places available to care for the ill. Such were the conditions in England from 1538–1540 during the reign of Henry VIII. No provision was made for the sick and poor, there was no lay organization to replace those who had fled, and no one to develop or teach others to carry on.

Source: Dietz, D. D., & Lehozky, A. R. (1963). *History and modern nursing*. Philadelphia, PA: F. A. Davis.

## The Dark Period of Nursing

The last half of the period between 1500 and 1860 is widely regarded as the “dark period of nursing” because nursing conditions were at their worst (Donahue, 1985). Education for girls, which had been provided by the nuns in religious schools, was lost. Because of the elimination of hospitals and schools, there was no one to pass on knowledge about caring for the sick. As a result, the hospitals were managed and staffed by municipal authorities; women entering nursing service often came from illiterate classes, and even then there were too few to serve (Dietz & Lehozky, 1963). The lay attendants who filled the nursing role were illiterate, rough, inconsiderate, and often immoral and alcoholic. Intelligent women and men could not be persuaded to accept such a degraded and low-status position in the offensive municipal hospitals of London. Nursing slipped back into a role of servitude as menial, low-status work. According to Donahue (1985), when a woman could no longer make it as a gambler, prostitute, or thief, she might become a nurse. Eventually, women serving jail sentences for crimes such as prostitution and stealing were ordered to care for the sick in the hospitals instead of serving their sentences in the city jail (Dietz & Lehozky, 1963). The nurses of this era took bribes from

patients, became inappropriately involved with them, and survived the best way they could, often at the expense of their assigned patients.

During this era, nursing had virtually no social standing or organization. Even Catholic sisters of the religious orders throughout Europe “came to a complete standstill” professionally because of the intolerance of society (Donahue, 1985, p. 231).

### MEDIA MOMENT

#### *Martin Chuzzlewit* (1843–1844)

By Charles Dickens

Charles Dickens created the immortal character of Sairey Gamp, who was a visiting nurse based on an actual hired attendant whom Dickens had met in a friend’s home:

She was a fat old woman, this Mrs. Gamp, with a husky voice and a moist eye, which she had a remarkable power of turning up and showing the white of it. Having very little neck, it cost her some trouble to look over herself, if one may say so, to those to whom she talked. She wore a very rusty black gown, rather the worse for snuff, and a shawl and bonnet to correspond. . . . The face of Mrs. Gamp—the nose in particular—was somewhat red and swollen, and it was difficult to enjoy her society without becoming conscious of the smell of spirits. Like most persons who have attained to great eminence in their profession, she took to hers very kindly; insomuch, that setting aside her natural predilections as a woman, she went to a lying-in [birth] or a laying-out [death] with equal zest and relish.

Sairey Gamp was hired to care for sick family members but was instead cruel to her patients, stole from them, and ate their rations; she was an alcoholic and has been immortalized forever as a reminder of the world in which Florence Nightingale came of age (Donahue, 1985; Minkowski, 1992).

## Early Organized Health Care in the Americas: A Brave New World

In the New World, the first hospital in the Americas—the Hospital de la Purísima Concepción—was founded some time before 1524 by Hernando Cones, the conqueror of Mexico. The first hospital in the continental United States was erected in Manhattan in 1658 for the care of sick soldiers and slaves. In 1717, a hospital for infectious diseases was built in Boston; the first hospital established by a private gift was the Charity Hospital in New Orleans.

A sailor, Jean Louis, donated the endowment for the hospital’s founding (Bullough & Bullough, 1978).

During the 17th and 18th centuries, colonial hospitals were often used to house the poor and downtrodden, though they bore little resemblance to modern hospitals. Hospitals called pesthouses were created to care for people with contagious diseases; their primary purpose was to protect the public at large, rather than to treat and care for the patients. Contagious diseases were rampant during the early years of the American colonies, often being spread by the large number of immigrants who brought these diseases with them on their long journeys to America. Medicine was not as developed as in Europe, and nursing remained in the hands of the uneducated. Average life expectancy at birth was only around 35 years by 1720. Plagues were a constant nightmare, with outbreaks of smallpox and yellow fever. In 1751, the first true hospital in the new colonies, Pennsylvania Hospital, was erected in Philadelphia on the recommendation of Benjamin Franklin (Kalisch & Kalisch, 1986).

By today’s standards, hospitals in the 19th century were disgraceful, dirty, unventilated, and contaminated by infections; to be a patient in a hospital actually increased one’s risk of dying. As in England, nursing was considered an inferior occupation. After the sweeping changes as a result of the Reformation, educated religious health workers were replaced with lay people who were “down and outers,” in prison, or had no option left except to work with the sick (Kalisch & Kalisch, 1986).

### The Chadwick Report and the Shattuck Report

Edwin Chadwick became a major figure in the development of the field of public health in Great Britain by drawing attention to the cost of the unsanitary conditions that shortened the lifespan of the laboring class and posed threats to the wealth of Britain. Although the first sanitation legislation, which established a National Vaccination Board, was passed in 1837, Chadwick found in his classic study, *Report on an Inquiry into the Sanitary Conditions of the Laboring Population of Great Britain*, that death rates were high in large industrial cities such as Liverpool. A more startling finding, from what is often referred to simply as the Chadwick Report, was that more than half the children of labor-class workers died by age 5, indicating poor living conditions that affected the health of the most vulnerable. Laborers lived only half as long as members of the upper classes.

One consequence of the report was the establishment of the first board of health, the General Board of Health for England, in 1848 (Richardson, 1887). More legislation followed that initiated social reform in the areas of child welfare, elder care, the sick, the mentally ill, factory

health, and education. Soon sewers and fireplugs, based on an available water supply, appeared as indicators that the public health linkages from the Chadwick Report had an impact.

In the United States during the 19th century, waves of epidemics of yellow fever, smallpox, cholera, typhoid fever, and typhus continued to plague the population as in England and the rest of the world. As cities continued to grow in the industrialized young nation, poor workers crowded into larger cities and suffered from illnesses caused by the unsanitary living conditions (Hanlon & Pickett, 1984). Similar to what occurred with Chadwick's classic study in England, Lemuel Shattuck, a Boston bookseller and publisher who had an interest in public health, organized the American Statistical Society in 1839 and issued a census of Boston in 1845. Shattuck's census revealed high infant mortality rates and high overall population mortality rates. In his *Report of the Massachusetts Sanitary Commission* in 1850, Shattuck not only outlined his findings on the unsanitary conditions, but also made recommendations for public health reform that included the keeping of population statistics and development of a monitoring system that would provide information to the public about environmental, food, and drug safety as well as infectious disease control (Rosen, 1958). He also called for services such as well-child care, school-age children's health, immunizations, mental health, health education for all, and health planning. The Shattuck Report was revolutionary in its scope and vision for public health, but it was virtually ignored during Shattuck's lifetime. It would not be until 19 years later, in 1869, that the first state board of health was formed (Kalisch & Kalisch, 1986; Minkowski, 1992).

## The Industrial Revolution

During the mid-18th century in England, capitalism emerged as an economic system based on profit. This emerging system resulted in mass production, as contrasted with the previous system of individual workers and craftsmen. In the simplest terms, the Industrial Revolution was the application of machine power to processes formerly done by hand. Machinery was invented during this era and ultimately standardized quality; individual craftsmen were forced to give up their crafts and lands and become factory laborers for the capitalist owners. All types of industries were affected; this newfound efficiency produced profits for owners of the means of production. As a result, the era of invention flourished, factories grew, and people moved in record numbers to work in the cities. Urban areas grew, tenement housing projects emerged, and overcrowded cities became serious threats to well-being (Donahue, 1985).

Workers were forced to go to the machines, rather than the other way around. Such relocations meant giving up not only farming, but also a way of life that had existed for centuries. The emphasis on profit over people led to child labor, frequent layoffs, and long workdays filled with stressful, tedious, unfamiliar work. Labor unions did not exist, nor was there any legal protection against exploitation of workers, including children (Donahue, 1985). All of these rapid changes and often threatening conditions were described in the work of Charles Dickens; in his book *Oliver Twist*, for example, children worked as adults without question.

According to Donahue (1985), urban life, trade, and industrialization contributed to these overwhelming health hazards, and the situation was confounded by the lack of an adequate means of social control. Reforms were desperately needed, and the social reform movement emerged in response to the unhealthy by-products of the Industrial Revolution. It was in this world of the 19th century that reformers such as John Stuart Mill (1806–1873) emerged. Although the Industrial Revolution began in England, it quickly spread to the rest of Europe and to the United States (Bullough & Bullough, 1978). The reform movement is critical to understanding the emerging health concerns that were later addressed by Florence Nightingale. Mill championed popular education, the emancipation of women, trade unions, and religious toleration. Other reform issues of the era included the abolition of slavery and, most important for nursing, more humane care of the sick, the poor, and the wounded (Bullough & Bullough, 1978). There was a renewed energy in the religious community with the reemergence of new religious orders in the Catholic church that provided service to the sick and disenfranchised.

Epidemics had ravaged Europe for centuries, but they became even more serious with urbanization. Industrialization had brought people to cities, where they worked in close quarters (as compared with the isolation of the farm) and contributed to the social decay of the second half of the 19th century. Sanitation was poor or nonexistent, sewage disposal from the growing population was lacking, cities were filthy, public laws were weak or nonexistent, and congestion of the cities inevitably brought pests in the form of rats, lice, and bedbugs, which transmitted many pathogens. Communicable diseases continued to plague the population, especially those who lived in these unsanitary environments. For example, during the mid-18th century typhus and typhoid fever claimed twice as many lives each year as did the Battle of Waterloo (Hanlon & Pickett, 1984). Through foreign trade and immigration, infectious diseases spread to all of Europe and eventually to the growing United States.

## John Snow and the Science of Epidemiology

John Snow, a prominent physician, is credited with being the first epidemiologist. In 1854, he demonstrated that cholera rates were linked with water pump use in London (Cartwright, 1972; Johnson, 2006). Snow investigated the area around Golden Square in London and arrived at the conclusion that cholera was not carried by bad air, nor necessarily by direct contact. He formed the opinion that diarrhea, unwashed hands, and shared food somehow played a large part in spreading the disease.

People around Golden Square in London were not supplied with water by pipes, but rather drew their water from surface wells by means of hand-operated pumps. A severe outbreak of cholera occurred at the end of August 1853, resulting in at least 500 deaths in just 10 days in Golden Square. By identifying rates of cholera, Snow for the first time linked the sources of the drinking water at the Broad Street pump to the outbreaks of cholera, thereby proving that cholera was a waterborne disease. Snow's epidemiological investigation started a train of events that eventually would end the great epidemics of cholera, dysentery, and typhoid (Minkowski, 1992).

When Snow attended the now-famous community meeting of Golden Square and gave his evidence, government officials asked him what measures were necessary. His reply was, "Take the handle off the Broad Street pump." The handle was removed the next day, and no more cholera cases occurred (Snow, 1855). Although he did not discover the true cause of the cholera—the identification of the organism—he came very close to the truth (Johnson, 2006; Rosen, 1958).

## And Then There Was Nightingale . . .

Florence Nightingale was named one of the 100 most influential persons of the last millennium by *Life* magazine (1997), one of only eight women so identified. Of those eight women, who included such luminaries as Joan of Arc, Helen Keller, and Elizabeth I, Nightingale was identified as a true "angel of mercy," having reformed military health care in the Crimean War and used her political savvy to forever change the way society views the health of the vulnerable, the poor, and the forgotten. She is probably one of the most written-about women in history (Bullough & Bullough, 1978). Florence Nightingale has become synonymous with modern nursing.

Florence Nightingale was the second child born to the wealthy English family of William and Frances Nightingale on May 12, 1820, in her namesake city, Florence, Italy. As a young child, Florence displayed incredible curiosity

and intellectual abilities not common to female children of the Victorian age. She mastered the fundamentals of Greek and Latin, and she studied history, art, mathematics, and philosophy. To her family's dismay, she believed that God had called her to be a nurse (Bostridge, 2008). Nightingale was keenly aware of the suffering that industrialization created; she became obsessed with the plight of the miserable and suffering. Conditions of general starvation had accompanied the Industrial Revolution, along with overflowing prisons and workhouses, and displaced persons in all sections of British life. Nightingale wrote in the spring of 1842, "My mind is absorbed with the sufferings of man; it besets me behind and before. . . . All that the poets sing of the glories of this world seem to me untrue. All the people that I see are eaten up with care or poverty or disease" (Woodham-Smith, 1951, p. 31).

### NOTE THIS!

Florence Nightingale never made a public appearance, never issued a public statement, and did not have the right to vote.

### RESEARCH ALERT

As part of her work, Florence Nightingale collaborated with William Farr, the eminent medical statistician. Nightingale's epidemiological investigations, supported by Farr, illustrated that attention to environmental cleanliness was an important factor in preventing spread of disease (Bostridge, 2008). Nightingale channeled her investigations to support hospital reforms and the need for educated nurses who could provide better management of the hospital environment. Statistical support and solicited criticism allowed Nightingale to argue more forcefully for her reforms.

Source: Keeling, A. W. (2006). "Carrying ointments and even pills!" Medicines in the work of Henry Street Settlement visiting nurses, 1893–1944. *Nursing History Review*, 14.

For Nightingale, her entire life would be haunted by this conflict between the opulent life of gaiety that she enjoyed and the plight and misery of the world, which she was unable to alleviate. She was, in essence, an "alien spirit in the rich and aristocratic social sphere of Victorian England" (Palmer, 1977, p. 14). Nightingale remained unmarried, and at the age of 25, she expressed a desire to be trained as a nurse in an English hospital. Her parents emphatically denied her request, and for the next 7 years, she made repeated attempts to change their minds and allow her to enter nurse training. She wrote, "I crave for some regular occupation, for something worth doing instead of frittering my time away on useless trifles" (Woodham-Smith, 1951, p. 162).



During this time, Nightingale continued her education through the study of math and science, and she spent 5 years collecting data about public health and hospitals (Dietz & Lehozky, 1963). While in Egypt, Nightingale studied Egyptian, Platonic, and Hermetic philosophy; Christian scripture; and the works of poets, mystics, and missionaries in her efforts to understand the nature of God and her “calling” as it fit into the divine plan (Calabria, 1996; Dossey, 2000).

The next spring, Nightingale traveled unaccompanied to the **Kaiserwerth Institute** in Germany and stayed there for 2 weeks, vowing to return to train as a nurse. In June 1851, Nightingale took her future into her own hands and announced to her family that she planned to return to Kaiserwerth and study nursing. According to Dietz and Lehozky (1963, p. 42), her mother had “hysterics” and “scene followed scene.” Her father “retreated into the shadows,” and her sister, Parthe, expressed that the family name was forever disgraced (Cook, 1913).

In 1851, at the age of 31, Nightingale was finally permitted to go to Kaiserwerth. She studied there for 3 months with Pastor Fliedner. Her family insisted that she tell no one outside the family of her whereabouts, and her mother forbade her to write any letters from Kaiserwerth. While there, Nightingale learned about the care of the sick and the importance of discipline and commitment of oneself to God (Donahue, 1985). She returned to England and cared for her then-ailing father, from whom she finally gained some support for her intent to become a nurse—her life-long dream (Bostridge, 2008).

In 1852, Nightingale wrote the essay “Cassandra,” which stands today as a classic feminist treatise against the idleness of Victorian women. Through her voluminous journal writings, Nightingale reveals her inner struggle throughout her adulthood with what was expected of a woman and what she could accomplish with her life. The life expected of an aristocratic woman in her day was one she grew to loathe; throughout her writings, she poured out her detestation of the life of an idle woman (Nightingale, 1979, p. 5). In “Cassandra,” Nightingale put her thoughts to paper, and many scholars believe that her eventual intent was to extend the essay to a novel. She wrote in “Cassandra,” “Why have women passion, intellect, moral activity—these three—in a place in society where no one of the three can be exercised?” (Nightingale, 1979, p. 37). Although uncertain about the meaning of the name “Cassandra,” many scholars believe that it came from the Greek goddess Cassandra, who was cursed by Apollo and doomed to see and speak the truth but never to be believed. Nightingale saw the conventional life of women as a waste of time and abilities. After receiving a generous yearly endowment from her father, Nightingale

moved to London and worked briefly as the superintendent of the hospital Establishment for Gentlewomen During Illness, finally realizing her dream of working as a nurse (Bostridge, 2008; Cook, 1913).

### The Crimean Experience: “I Can Stand Out the War with Any Man”

Nightingale’s opportunity for greatness came when she was offered the position of female nursing establishment of the English General Hospitals in Turkey by the British Secretary of War, Sir Sidney Herbert. Soon after the outbreak of the Crimean War, stories of the inadequate care and lack of medical resources for the soldiers became widely known throughout England (Woodham-Smith, 1951). The country was appalled at the conditions so vividly portrayed in the *London Times*. Pressure increased on Sir Herbert to rectify the situation. He knew of one woman who was capable of bringing order out of the chaos and wrote the following now-famous letter to Nightingale on October 15, 1854, as a plea for her service:

There is but one person in England that I know of who would be capable of organising and superintending such a scheme. . . . The difficulty of finding women equal to a task after all, full of horrors, and requiring besides knowledge and good will, great energy and great courage, will be great. Your own personal qualities, your knowledge and your power of administration and among greater things your rank and position in Society give you advantages in such a work which no other person possesses. (Woodham-Smith, 1951, pp. 87–89)

Nightingale took the challenge from Sir Herbert and set sail with 38 self-proclaimed nurses with varied training and experiences, of whom 24 were Catholic and Anglican nuns. Their journey to the Crimea took a month. On November 4, 1854, the brave nurses arrived at Istanbul and were taken to Scutari the same day. Faced with 3,000 to 4,000 wounded men in a hospital designed to accommodate 1,700 patients, the nurses went to work (Kalisch & Kalisch, 1986). This is the scene that the nurses faced: There were 4 miles of beds 18 inches apart. Most soldiers were lying naked with no bed or blanket. There were no kitchen or laundry facilities. The little light present took the form of candles in beer bottles. The hospital was literally floating on an open sewage lagoon filled with rats and other vermin (Donahue, 1985).

The barracks “hospital” was more of a death trap than a place for healing before Nightingale’s arrival. In a letter to Sir Herbert, Nightingale, demonstrating her sense of humor, wrote, with tongue in cheek, that “the vermin might, if they had but unity of purpose, carry off the four

miles of beds on their backs and march them into the War Office” (Stanmore, 1906, pp. 393–394).

By taking the newly arrived medical equipment and setting up kitchens, laundries, recreation rooms, reading rooms, and a canteen, Nightingale and her team of nurses proceeded to clean the barracks of lice and filth. Nightingale was in her element: She set out not only to provide humane health care for the soldiers, but also to essentially overhaul the administrative structure of the military health services (Williams, 1961). Nightingale and her nurses faced overwhelming odds and deplorable conditions. No accommodations had been made for their quarters, so they ended up in one of the hospital towers, 39 women crowded into six small rooms. In addition to having no furniture, one of the rooms even contained a long-neglected, forgotten corpse swarming with vermin! Ever the disciplinarian, Nightingale insisted on strict adherence to a standard nurse uniform: gray tweed dresses, gray worsted jackets, plain white caps, short woolen cloaks, and brown scarves embroidered in red with the words “Scutari Hospital” (Bullough & Bullough, 1978).

### Florence Nightingale and Sanitation

Although Nightingale never accepted the germ theory, she demanded clean dressings; clean bedding; well-cooked, edible, and appealing food; proper sanitation; and fresh air. After the other nurses were asleep, Nightingale

made her famous solitary rounds with a lamp or lantern to check on the soldiers. Nightingale had a lifelong pattern of sleeping few hours, spending many nights writing, developing elaborate plans, and evaluating implemented changes. She seldom believed in the “hopeless” soldier; instead, she saw only one that needed extra attention. Nightingale was convinced that most of the maladies that the soldiers suffered and died from were preventable (Williams, 1961).

Before Nightingale’s arrival and her radical and well-documented interventions based on sound public health principles, mortality rates for the Crimea War were estimated to range from 42% to 73%. Nightingale is credited with reducing that rate to 2% within 6 months of her arrival at Scutari. She did so by conducting careful, scientific epidemiological research (Dietz & Lehozky, 1963). Upon arriving at Scutari, Nightingale’s first act was to order 200 scrubbing brushes. The death rate fell dramatically once Nightingale discovered that the hospital was built literally over an open sewage lagoon. A dead horse was even retrieved from the sewer system under Scutari (Andrews, 2003).

“Bad sanitary, bad architectural, and bad administrative arrangements often make it impossible to nurse.”

—Florence Nightingale

### GLOBAL CONNECTION



“I made up my mind that if the army wanted nurses, they would be glad of me, and with all the ardor of my nature, which ever carried me where inclination prompted, I decided that I would go to the Crimea; and go I did, as all the world knows.”

—Mary Seacole

Mary Seacole, contemporary of Florence Nightingale, was named in 2004 the greatest black Briton of all time. Although few have heard of Seacole, she was an important figure in the establishment of nursing as a profession. The Royal College of Nursing President Sylvia Denton said of this honor: “Mary Seacole stood up against the discrimination and prejudices she encountered. Against all odds, Mary had an unshakeable belief in the power of nursing to make a difference.”

Seacole was born in the early 1880s as Mary Grant, in Kingston, Jamaica, to a Scottish father and a free black Jamaican mother. Her mother taught her about Creole medicine and she grew up well educated. In 1838, she married Edward Seacole, who died shortly afterward. During their short marriage, they traveled

around the Caribbean and Central America. After her husband’s death, she returned to Kingston to help run the family boarding-house. During two epidemics of cholera and one epidemic of yellow fever, she sharpened her skills as a nurse, even performing a postmortem autopsy of a baby who had died of cholera.

Seacole eventually traveled with her brother to other South American countries, establishing hotels and providing care for the sick. When she learned of the Crimean War, she traveled to England, at her own expense, and offered her services to the British Army. She was refused because of the color of her skin. The putdown did not deter Seacole, who funded her own 3,000-mile trip to Crimea, where she offered her services to Florence Nightingale. Nightingale refused her offer as a nurse, so Seacole set up a “hotel for invalids”—called the British Hotel—in nearby Baklava.

At her hotel, Seacole banned drunkenness and gambling, dispensed medicines, fed soldiers meals, and tended to the wounded on the battlefield under fire, making home visits to campsites in the area. Seacole’s hotel was a financial disaster,

*Continued*

because she did not require payment for services and did not have the support of the British government. She used all of her savings to secure medicine and other needed supplies for the sick. When the Crimean War ended in 1856, Seacole was in severe debt and struggled in her lifetime residence in England. Her writings provided some financial support.

Through the years, historians have come to recognize Seacole's heroic and strong commitment to the development of war nursing. It is possible that Nightingale and Seacole never met. Historical evidence is inconclusive regarding the exact nature of their personal contact at Scutari. Nightingale's refusal to accept Seacole's offer to join her nurses at Sebastopol reflected the discrimination and prejudice of the day. Seacole received the Crimean Medal, the French Legion of Honor, and a Turkish Medal. She died in 1881 and is buried in London.

According to Palmer (1982), Nightingale possessed the qualities of a good researcher: insatiable curiosity, command of her subject, familiarity with methods of inquiry, a good background of statistics, and the ability to discriminate and abstract. She used these skills to maintain detailed and copious notes and to codify observations. Nightingale relied on statistics and attention to detail to back up her conclusions about sanitation, management of care, and disease causation. Her now-famous "cox combs" are a hallmark of military health services management, through which she diagrammed deaths in the Army from wounds and from other diseases and compared them with deaths that occurred in similar populations in England (Palmer, 1977).

Nightingale was first and foremost an administrator: She believed in a hierarchical administrative structure with ultimate control lodged in one person to whom all subordinates and offices reported. Within a matter of weeks of her arrival in the Crimea, Nightingale was the acknowledged administrator and organizer of a mammoth humanitarian effort. From her Crimean experience on, Nightingale involved herself primarily in organizational activities and health planning administration. Palmer (1982) contends that Nightingale "perceived the Crimean venture, which was set up as an experiment, as a golden opportunity to demonstrate the efficacy of female nursing" (p. 4). Although Nightingale faced initial resistance from the unconvinced and oppositional medical officers and surgeons, she boldly defied convention and remained steadfastly focused on her mission to create a sanitary and highly structured environment for her "children"—the British soldiers who dedicated their lives to the defense of Great Britain. Proving her resilience and insistence on absolute authority regarding nursing and the hospital environment, Nightingale was known to send nurses home to England from the Crimea for suspicious alcohol use and character weakness.

### Selected References on the Life of Mary Seacole

- Crawford, P. (1992). The other lady with the lamp: Nursing legacy of Mary Seacole. *Nursing Times*, 88(11), 56–58.
- Gustafson, M. (1996). Mary Seacole, the Florence Nightingale of Jamaica. *Christian Nurse International*, 12(4), 9.
- King, A. (1974). Mary Seacole, part I: A matter of life. *Essence*, 4(11), 32.
- King, A. (1974). Mary Seacole, part II: The Crimea. *Essence*, 4(12), 68, 94.
- Messmer, P. R., & Parchment, Y. (1998). Mary Grant Seacole: The first nurse practitioner. *Clinical Excellence for Nurse Practitioners*, 2(1), 47–51.
- Payne, D. (1999). Face to face: Florence Nightingale and Mary Seacole battle it out face to face. *Nursing Times*, 95(19), 26–27.

It was her success at Scutari that enabled Nightingale to begin a long career of influence on the public's health through social activism and reform, health policy, and the reformation of career nursing. Using her well-publicized successful "experiment" and supportive evidence from the Crimean War, Nightingale effectively argued the case for the reform and creation of military health that would serve as the model for people in uniform to the present (D'Antonio, 2002). Nightingale's ideas about proper hospital architecture and administration influenced a generation of medical doctors and the entire world, in both military and civilian service. Her work in *Notes on Hospitals*, published in 1859, provided the template for the organization of military health care in the Union Army when the U.S. Civil War erupted in 1861. Her vision for health care of soldiers and the responsibility of the governments who send them to war continues today; her influence can be seen throughout the last century and into the 21st century, as health care for the women and men who serve their countries is a vital part of the wellbeing of not only the soldiers but also society in general (D'Antonio, 2002). See **Box 3-1**.

Many soldiers wrote about their experiences of the Angel of Mercy, Florence Nightingale. One soldier wrote perhaps one of the most revealing tributes to this 'Lady with the Lamp':

What a comfort it was to see her pass even. She would speak to one and nod and smile to as many more, but she could not do it all, you know. We lay there by hundreds, but we could kiss her shadow as it fell, and lay our heads on the pillow again content.

—Tyrell, 1856, p. 310

### BOX 3-1 Singing to Promote a Healthy Body and Soul: “The Nightingale’s Song to the Sick Soldier”

Florence Nightingale set an example to all with her commitment and compassion to the weary and the sick. She had a special fondness for animals and birds and regularly showed compassion for them in correspondence. In one such letter to her cousin, she said, “There is nothing that makes my heart thrill like the voice of birds, much more than the human voice. It is the angels calling us with their songs.” After her extraordinary acclaim resulting from her heroic actions during the Crimean War, numerous articles, songs, and poems of praise were written that linked Nightingale’s compassion to the beautiful song of a nightingale. One such broadside that circulated after the war was published anonymously by *Punch* magazine entitled “The Nightingale’s Song to the Sick Soldier.” A broadside was a song or poem that was written to reflect the feelings and sentiment of the community.

The title of this poem is used as a metaphor for Nightingale’s contribution to the war as a beautiful song. Last summer while preparing to enter nursing school, I volunteered at a hospital where my job was to help conduct recreational activities for the patients on the hospice ward. My favorite part of the day was when I got the chance to sing hymns to the

patients. They would reach their hands out to me and smile. The nurses often remarked that many of these patients had not smiled in weeks. I was able to use singing as a way to touch the souls of the sick and bring comfort to those who were sad. After realizing how the singing touched my patients, I thought about how I could integrate singing, my other profession, into my nursing practice as a way to focus on the needs of the soul and the body. I believe that a nurse can communicate the joy that is inside us to the patient through the use of music as an act of compassion.

In this poem, Nightingale’s legacy as a model, compassionate caregiver is conveyed through singing and the song of a nightingale. A song that was to keep a weary soldier alive and hopeful. It is this song that should be kept in the hearts of each nurse. It should radiate outwardly to “infect” all those around and emit a joyful spirit that is highly contagious.

Shandi Shiver, Senior BSN Nursing Student  
Professional singer  
The University of Southern Mississippi  
School of Nursing

An African nurse from Jamaica, Mary Grant Seacole, offered her services to Nightingale after hearing of the need for nurses in Scutari. Although Nightingale rejected Seacole as a part of her nursing staff, Seacole persisted in her passion to provide care to the British military (Payne, 1999). Using her own money, she set up a type of inn that provided food and lodging for soldiers and their families near Scutari (Hine, 1989). Although Seacole is less well known than Nightingale, her contributions to nursing in wartime were significant in the history of minority nursing. Seacole is often referred to as “the other lady with the lamp” and “the Florence Nightingale of Jamaica.” The School of Nursing in Kingston, Jamaica, is today named in her honor (Crawford, 1992).

Scores of books and articles have been written about Nightingale—she is an almost mythic figure in history. She truly was a beloved legend throughout Great Britain by the time she left the Crimea in July 1856, 4 months after the war ended. Longfellow immortalized this “Lady with the Lamp” in his poem of “Santa Filomena” (Longfellow, 1857).

## Returning Home a Heroine: The Political Reformer

When Nightingale returned to London, she found that her efforts to provide comfort and health to the British soldier succeeded in making heroes of both Nightingale

and the soldiers (Woodham-Smith, 1951). Both had suffered from negative stereotypes: The soldier was often portrayed as a drunken oaf with little ambition or honor; the nurse was perceived as a tipsy, self-serving, illiterate, promiscuous loser. After the Crimean War and the efforts of Nightingale and her nurses, both returned with honor and dignity, never more to be downtrodden and disrespected.

After her return from the Crimea, Florence Nightingale never made a public appearance, never attended a public function, and never issued a public statement (Bullough & Bullough, 1978). Even so, she single-handedly raised nursing from, as she put it, “the sink it was” into a respected and noble profession (Palmer, 1977). As an avid scholar and student of the Greek writer Plato, Nightingale believed that she had a moral obligation to work primarily for the good of the community. Because she believed that education formed character, she insisted that nursing must go beyond care for the sick; the mission of the trained nurse must include social reform to promote the good. This dual mission of nursing—caregiver and political reformer—has shaped the profession as we know it today, especially in the field of community health nursing. LeVasseur (1998) contends that Nightingale’s insistence on nursing’s involvement of a larger political ideal in the historical foundation of the field distinguishes us from other scientific disciplines, such as medicine.



How did Nightingale accomplish this transformation? You will learn throughout this text how nurses effect change through others. Florence Nightingale is the standard by which we measure our effectiveness. She effected change through her wide command of acquaintances: Queen Victoria was a significant admirer of her intellect and ability to effect change, and she used her position as national heroine to get the attention of elected officials in Parliament. She was tireless and had an amazing capacity for work. She used people (Bostridge, 2008). Everyone who could be of service to her was enlisted to help her meet her goals. Her brother-in-law, Sidney Herbert, was a member of Parliament and often delivered her “messages” in the form of legislation. When Nightingale wanted the public incited, she turned to the press, writing letters to the *London Times* and having others of influence write articles. She was not above threats to “go public” by certain dates if an elected official refused to establish a commission or appoint a committee. And when those commissions were formed, Nightingale was ready with her list of selected people for appointment (Palmer, 1982).

### Nightingale and Military Reforms

The first real test of Nightingale’s military reforms came in the United States during the “War Between the States”—the Civil War. Nightingale was asked by the Union to advise on the organization of hospitals and care of the sick and wounded. She sent recommendations back to the United States based on her experiences and analysis in the Crimean War, and her advisement and influence gained wide publicity. Following her recommendations, the Union Army set up a sanitary commission and provided for regular inspection of camps. Nightingale also expressed a desire to help with the Confederate military but, unfortunately, had no channel of communication with them (Bullough & Bullough, 1978).

### The Nightingale School of Nursing at St. Thomas: The Birth of Professional Nursing

The British public honored Nightingale by endowing 50,000 pounds in her name upon her return to England from the Crimea. The money had been raised from the soldiers under her care and donations from the public. This Nightingale Fund eventually was used to create the **Nightingale School of Nursing at St. Thomas**, which was to be the beginning of professional nursing (Donahue, 1985).

Nightingale, at the age of 40, decided that St. Thomas’s Hospital was the place for her training school for nurses. While the negotiations for the school went forward, she spent her time writing *Notes on Nursing: What It Is and What It Is Not*, which was published in 1859 (Bostridge, 2008). The small book of 77 pages, written for the British

mother, was an instant success. An expanded library edition was written for nurses and used as the textbook for the students at St. Thomas. The book has since been translated into multiple languages, although it is believed that Nightingale refused all royalties earned from the publication of the book (Cook, 1913).

The nursing students chosen for the new training school were handpicked; they had to be of good moral character, sober, and honest. Nightingale believed that the strong emphasis on morals was critical to gaining respect for the new “Nightingale nurse,” with no possible ties to the disgraceful association of past nurses. Nursing students were monitored throughout their 1-year program both on and off the hospital grounds; their activities were carefully watched for character weaknesses, and discipline was severe and swift for violators. Accounts from Nightingale’s journals and notes revealed instant dismissal of nursing students for such behaviors as “flirtation, using the eyes unpleasantly and being in the company of unsavory persons.” Nightingale contended that “the future of nursing depends on how these young women behave themselves” (Smith, 1934, p. 234). She knew that experiment at St. Thomas to educate nurses and raise nursing to a moral and professional calling represented a drastic departure from the past images of nurses and would take extraordinary women of high moral character and intelligence. Nightingale knew every nursing student (called a probationer), personally, often having the students at her house for weekend visits. She devised a system of daily journal keeping for the probationers; Nightingale herself read the journals monthly to evaluate their character and work habits. Every nursing student admitted to St. Thomas had to submit an acceptable “letter of good character,” and Nightingale herself placed graduate nurses in approved nursing positions (Nightingale, 1915).

One of the most important features of the Nightingale School was its relative autonomy. Both the school and the hospital nursing service were organized under the head matron. This was especially significant because it meant that nursing service began independently of the medical staff in selecting, retaining, and disciplining students and nurses (Bullough & Bullough, 1978; Nightingale, 1915).

Nightingale was opposed to the use of a standardized government examination and the movement for licensure of trained nurses. She believed that schools of nursing would lose control of educational standards with the advent of national licensure, most notably those standards related to moral character. Nightingale led a staunch opposition to the movement by the British Nurses Association (BNA) for licensure of trained nurses, which the BNA believed critical to protecting the public’s safety by ensuring the

qualification of nurses by licensure exam. Nightingale was convinced that qualifying a nurse by examination tested only the acquisition of technical skills, not the equally important evaluation of character. She believed nursing involved “divergencies too great for a single standard to be applied” (Nutting & Dock, 1907; Woodham-Smith, 1951).

I look to the day when there are no nurses to the sick but only nurses to the well.

—Florence Nightingale, 1893

### Taking Health Care to the Community: Nightingale and Wellness

Early efforts to distinguish hospital from community health nursing include Nightingale’s views on “health nursing,” which she distinguished from “sick nursing.” She wrote two influential papers: “Sick-Nursing and Health-Nursing,” which was read in the United States at the Chicago Exposition in 1893, and “Health Teaching in Towns and Villages” in 1894 (Monteiro, 1985). Both papers praised the success of prevention-based nursing practice. Winslow (1946) acknowledged Nightingale’s influence in the United States by being one of the first in the field of public health to recognize the importance of taking responsibility for one’s own health. As she wrote in 1891, “there are more people to pick us up and help us stand on our own two feet” (Attewell, 1996). According to Palmer (1982), Nightingale was a leader in the wellness movement long before the concept was identified. Nightingale saw the nurse as the key figure in establishing a healthy society, and she envisioned a logical extension of nursing in acute hospital settings to the broadest sense of community used in nursing today. Writing in *Notes on Nursing*, she visualized the nurse as “the nation’s first bulwark in health maintenance, the promotion of wellness, and the prevention of disease” (Palmer, 1982, p. 6).

**William Rathbone**, a wealthy ship owner and philanthropist, is credited with the establishment of the first visiting nurse service, which eventually evolved into district nursing in the community. He was so impressed with the private-duty nursing care that his sick wife had received at home that he set out to develop a “district nursing service” in Liverpool, England. At his own expense, in 1859, he developed a corps of nurses who were trained to care for the sick poor in their homes (Bullough & Bullough, 1978; Howse, 2007; Minkowski, 1992). He divided the community into 16 districts; each was assigned a nurse and a social worker who provided nursing and health education. Rathbone’s experiment in district nursing was so successful that he was unable to find enough nurses to

work in the districts. Rathbone then contacted Nightingale for assistance. Her recommendation was to train more nurses, and she advised Rathbone to approach the Royal Liverpool Infirmary with a proposal for opening another training school for nurses (Rathbone, 1890). The infirmary agreed to Rathbone’s proposal, and district nursing soon spread throughout England as successful “health nursing” in the community for the sick poor through voluntary agencies (Rosen, 1958).

Ever the visionary, Nightingale (1893) contended that “Hospitals are but an intermediate stage of civilization. The ultimate aim is to nurse the sick poor in their own homes” (Attewell, 1996). She also wrote in regard to visiting families at home (1894), “We must not talk to them or at them but with them” (Attewell, 1996). A service similar to that begun by Rathbone, **health visiting**, began in Manchester, England, in 1862 by the Manchester and Salford Sanitary Association. The purpose of placing “health visitors” in the home was to provide health information and instruction to families. Eventually, health visitors evolved to provide preventive health education and district nurses to care for the sick at home (Bullough & Bullough, 1978; Howse, 2007).

### Nightingale’s Legacy

When Nightingale returned to London after the Crimean War, she remained haunted by her experiences related to the soldiers dying of preventable diseases. She was troubled by nightmares and had difficulty sleeping in the years that followed. She wrote in her journal: “Oh my poor men; I am a bad mother to come home and leave you in your Crimean graves. . . . I can never forget. . . . I stand at the altar of the murdered men and while I live, I fight their cause” (Woodham-Smith, 1983, pp. 178, 193). Nightingale became a prolific writer and a staunch defender of the causes of the British soldier, sanitation in England and India, and trained nursing.

As a woman, Nightingale was not able to hold an official government post or to vote. Historians have had varied opinions about the exact nature of the disability that kept her homebound for the remainder of her life. Recent scholars have speculated that she experienced post-traumatic stress disorder from her experiences in the Crimea; there is also considerable evidence that she suffered from the painful disease brucellosis (Barker, 1989; Nightingale, 1915; Young, 1995). Nevertheless, Nightingale exerted incredible influence through friends and acquaintances, directing from her sickroom sanitation and poor law reform. Her mission to “cleanse” spread from the military to the British Empire; her fight for improved sanitation both at home and in India consumed her energies for the remainder of her life (Vicinus & Nergaard, 1990).

According to Monteiro (1985), two recurrent themes are found throughout Nightingale's writings about disease prevention and wellness outside the hospital. *The most persistent theme is that nurses must be trained differently and instructed specifically in district and instructive nursing.* Nightingale consistently wrote that the "health nurse" must be trained in the nature of poverty and its influence on health, something she referred to as the "pauperization" of the poor. She also believed that above all, health nurses must be good teachers about hygiene and helping families learn to better care for themselves (Nightingale, 1893). She insisted that untrained, "good intended women" could not substitute for nursing care in the home. Instead, Nightingale pushed for an extensive orientation and additional training, including prior hospital experience, before someone was hired as a district nurse. She outlined the qualifications in her paper "On Trained Nursing for the Sick Poor," in which she called for 1 month's "trial" in district nursing, 1 year's training in hospital nursing, and 3 to 6 months training in district nursing (Monteiro, 1985). According to Nightingale, "There is no such thing as amateur nursing."

The second theme that emerged from her writings was the focus on the role of the nurse. *Nightingale clearly distinguished the role of the health nurse in promoting what we today call self-care.* In the past, philanthropic visitors under the aegis of Christian charity would visit the homes of the poor and offer them relief (Monteiro, 1985). Nightingale believed that such activities did little to teach the poor to care for themselves and further "pauperized" them—keeping them dependent and vulnerable, unhealthy, prone to disease, and reliant on others to keep them healthy. The nurse had to help the families at home manage a healthy environment for themselves, and Nightingale saw a trained nurse as being the only person who could pull off such a feat. She stated, "Never think that you have done anything effectual in nursing in London, till you nurse not only the sick poor in workhouses, but those at home."

Although Nightingale is best known for her reform of hospitals and military health care, she was a great believer in the future of health care, which she anticipated should be preventive in nature and would more than likely take place in the home and community. Her accomplishments in the field of "sanitary nursing" extended beyond the walls of the hospital to include workhouse reform and community sanitation reform. In 1864, Nightingale and Rathbone once again worked together to lead the reform of the Liverpool Workhouse Infirmary, where more than 1,200 sick paupers were crowded into unsanitary and unsafe conditions (Bostridge, 2008). Under the British Poor Laws, the most desperately poor of the large cities were gathered into large workhouses. When they became

sick, they were also sent to the workhouse. Trained nursing care in these venues was all but nonexistent. Through legislative pressure and a well-designed public campaign describing the horrors of the workhouse infirmary, reform of the workhouse system was accomplished by 1867. Although it was not as complete as Nightingale had wanted, nevertheless nurses were in place and being paid a salary (Nightingale, 1915; Seymer, 1954).

### ETHICAL CONNECTION

There are five essential points in securing the health of houses:

- Pure air
- Pure water
- Efficient drainage
- Cleanliness
- Light

Sources: Nightingale, F. (1860). *Notes on nursing: What it is and what it is not.* London: Harrison; Cook, 1913, p. 133.

To set these poor sick people going again, with a sound and clean house, as well as with a sound body and mind, is about as great a benefit as can be given them—worth acres of gifts and relief. This is depauperizing them."

—Florence Nightingale

My view you know is that the ultimate destination of all nursing is the nursing of the sick in their own homes. . . . I look to the abolition of all hospitals and workhouse infirmaries. But no use to talk about the year 2000."

—Florence Nightingale, letter to Henry Bonham Carter, 1867

By 1901, Nightingale lived in a world without sight or sound, leaving her unable to write. Over the next 5 years, she lost her ability to communicate and most days existed in a state of unconsciousness. In November 1907, Nightingale was honored with the Order of Merit by King Edward VII, the first time the award was ever given to a woman. In May 1910, the Nightingale Training School of Nursing at St. Thomas celebrated its Jubilee. By that time, there were now more than 1,000 training schools for nurses in the United States alone (Cook, 1913).

Nightingale died in her sleep around noon on August 13, 1910, and was buried quietly and without pomp near the family's home at Embley, her coffin carried by six sergeants of the British Army (Bostridge, 2008).

Only a small cross marks her grave at her request: “FN. Born 1820. Died 1910.” (Brown, 1988). The family refused a national funeral and burial at Westminster Abbey out of respect for Nightingale’s last wishes. She had lived for 90 years and 3 months.

Money would be better spent in maintaining health in infancy and childhood than in building hospitals to cure disease.

—Florence Nightingale, 1894

It is cheaper to promote health than to maintain people in sickness.

—Florence Nightingale, 1894

## A DAY IN THE LIFE

### Barbara Dossey

Barbara Dossey is a noted Nightingale scholar and the author of the book *Florence Nightingale: Mystic, Visionary, Healer* (Philadelphia, PA: Lippincott Williams & Wilkins, 2000).

Was Nightingale a mystic? Mysticism is often defined as an individual’s direct, unmediated experience of God. A mystic is a person who has such an experience, to a greater or lesser degree. Nightingale received her first call from God at age 16 and received three more direct calls from God in her life. She believed the messages of Christianity, but was tolerant and ecumenical in her attitude toward world religions. She wrote, “To know God we must study Him in the Pagan and Jewish dispensations as in the Christian.”

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## Early Nursing Education and Organization in the United States

In the United States, the first training schools for nursing were modeled after the Nightingale School of Nursing at St. Thomas in London. Bellevue Training School for Nurses in New York City; Connecticut Training School for Nurses in New Haven, Connecticut; and the Boston Training School for Nurses at Massachusetts General Hospital in Boston were the earliest programs for trained nurses in the United States (Nutting & Dock, 1907). Based on the Victorian belief in the natural affinity for women to be sensitive, possess high morals, and be caregivers, early nursing training required that applicants be female. Sensitivity, high moral character, purity of character, subservience,

and “ladylike” behavior became the associated traits of a “good nurse,” thus setting the “feminization of nursing” as the ideal standard for a good nurse. These historical roots of gender- and race-based caregiving excluded males and minorities from the nursing profession, a trend that continued for many years and still influences career choices for men and women today. These early training schools provided a stable, subservient, white female workforce, as student nurses served as the primary nursing staff for these early hospitals.

A significant report, known simply as the **Goldmark Report** (more formally, *Nursing and Nursing Education in the United States*), was released in 1922; it advocated the establishment of university schools of nursing to train nursing leaders. The report, initiated by Nutting in 1918, was an exhaustive (500-page) and comprehensive investigation into the state of nursing education and training. Author Josephine Goldmark, a social worker and pioneer in research into nursing preparation in the United States, stated:

From our field study of the nurse in public health nursing, in private duty, and as instructor and supervisor in hospitals, it is clear that there is need of a basic undergraduate training for all nurses alike, which should lead to a nursing diploma. (Goldmark, 1923, p. 35)

The first university school of nursing was established at the University of Minnesota in 1909. Although the new nurse training school was under the college of medicine and offered only a 3-year diploma, the Minnesota program nevertheless represented a significant leap forward in nursing education.

*Nursing for the Future* (the so-called Brown Report), authored by Esther Lucille Brown in 1948 and sponsored by the Russell Sage Foundation, was critical of the quality and structure of nursing schools in the United States. The Brown Report ultimately became the catalyst for the implementation of educational nursing program accreditation through the National League for Nursing (NLN; Brown, 1936, 1948).

Positive changes also occurred for minority and male nurses. As a result of the post–World War II nursing shortage, the associate degree in nursing (ADN) was established by Mildred Montag in 1952 as a 2-year program for registered nurses (Montag, 1959). In 1950, nursing became the first profession for which the same licensure exam, the State Board Test Pool, was used throughout the nation to license registered nurses (RNs). This increased mobility for the registered nurse resulted in a significant advantage for the relatively new profession of nursing (State Board Test Pool Examination, 1952).



## THINK ABOUT THIS



Some nurses believe that the legacy of Florence Nightingale is holding nursing back and represents the negative and backward elements of nursing. This view cites as evidence Nightingale's support for the subordination of nurses to physicians, opposition to registration of nurses, and failure to see mental health nurses as part of the profession. Wheeler has gone so far as to say, "The nursing profession needs to exorcise the myth of Nightingale, not necessarily because she was a bad person, but because the impact of her legacy has held the profession back too long." After reading this chapter, what do you think? Is Nightingale relevant in the 21st century to the nursing profession? Why or why not?

Source: Wheeler, W. (1999). Is Florence Nightingale holding us back? *Nursing* 99, 29(10), 82–23.

Preventable disease should be looked upon as a social crime.

—Florence Nightingale, 1894

## The Evolution of Nursing in the United States: The First Century of Professional Nursing

Early nurse leaders of the century included **Isabel Hampton Robb**, who in 1896 founded the Nurses' Associated Alumnae. In 1911, this organization officially became known as the **American Nurses Association (ANA)**. **Lavinia Lloyd Dock** was a militant suffragist who linked women's roles as nurses to the emerging women's movement in the United States. By contrast, Isabel Hampton Robb—like Nightingale herself—opposed the women's suffragist movement, instead focusing on the need for women to own property in Great Britain. Her well-reasoned position was that property ownership was the link to women's voting power.

Mary Adelaide Nutting, Lavinia Lloyd Dock, Sophia Palmer, and Mary E. Davis were instrumental in developing the first nursing journal, **American Journal of Nursing (AJN)**, in October 1900. Through the ANA and the *AJN*, nurses then had a professional organization and a national journal with which to communicate with one another (Kalisch & Kalisch, 1986).

State licensure of trained nurses began in 1903 with the enactment of North Carolina's licensure law for nursing. Shortly thereafter, New Jersey, New York, and Virginia passed similar licensure law for nursing. Professional

nursing was well on its way to public recognition of practice and educational standards, as state after state passed similar legislation over the next several years.

**Margaret Sanger** worked as a nurse on the Lower East Side of New York City in 1912 with immigrant families. She was astonished to find widespread ignorance among these families about conception, pregnancy, and childbirth. After a horrifying experience with the death of a woman from a failed self-induced abortion, Sanger devoted her life to teaching women about birth control. A staunch activist in the early family planning movement, Sanger is credited with founding Planned Parenthood of America (Sanger, 1928).

## THINK ABOUT THIS



There have been many theories about the cause of Nightingale's chronic illness, which led to her being an invalid for most of her adult life. Many people have interpreted her condition as hypochondriacal, something of a melodrama of the Victorian times. Nightingale was rich and could take to her bed. Rumors have floated around among nursing students for years that she suffered from tertiary syphilis. She became ill during the Crimean War in May 1855 and was diagnosed with a severe case of Crimean fever. Today Crimean fever is recognized as Mediterranean fever and is categorized as brucellosis. Nightingale also developed ankylosing spondylitis, or inflammation of the spine.

For the next 34 years, Nightingale managed to continue her writing and advocacy, often predicting her imminent death. Some have claimed that she suffered from bipolar disorder, causing her to experience long periods of depression and remarkable bursts of productivity. Read about the various theories of her chronic disabling condition and reflect on your own conclusions about her mysterious illness.

Sources: Dossey, B. (2000). *Florence Nightingale: Mystic, visionary, healer* (Philadelphia, PA: Lippincott Williams & Wilkins); Nightingale suffered bipolar disorder. (2004). *Australian Nursing Journal*, 12, 2.

As the modern nursing movement is emphatically an outcome of the original and general woman's movement . . . it would be a great pity for them [nurses] to allow one of the most remarkable movements of the day to go on under their eyes without comprehending it. . . . Unless we possess the ballot we shall not know when we may get up in the morning to find all that we had gained has been taken from us.

—Lavinia Lloyd Dock, 1907

## MEDIA MOMENT



## African American Nurses in History

Read more about the contributions of African American nurses . . .

- Alexander, Z., & Dewjee, A. (1981). Mary Seacole. *History Today*, 31, 45.
- Bell, P. L. (1993). "Making do" with the midwife: Arkansas's Mamie O. Hale in the 1940s. *Nursing History Review*, 1, 155–169.
- Brewman, M. P. (1952). The Negro nurse. *Nation*, 175(8), 160.
- Buhler-Wilkerson, K. (1992). Caring in its "proper place": Race and benevolence in Charleston, SC, 1813–1930. *Nursing Research*, 41(1), 14–20.
- Campinha-Bacote, J. (1988). The Black nurses' struggle toward equality: An historical account of the National Association of Colored Graduate Nurses. *Journal of National Black Nurses Association*, 2(2), 15–25.
- Carnegie, M. E. (1992). Black nurses in the United States: 1879–1992. *Journal of National Black Nurses Association*, 6(1), 13–18.
- Chayer, M. E. (1954). Mary Eliza Mahoney. *American Journal of Nursing*, 54(4), 429–431.
- Davis A. T. (1999). *Early black American leaders in nursing: Architects for integration and equality*. (National League for Nursing Series.) Sudbury, MA: Jones and Bartlett.
- Doona, M. E. (1986). Glimpses of Mary Eliza Mahoney (7 May 1845–4 January 1929). *Journal of Nursing History*, 1(2), 20–34.
- Elmore, J. A. (1976). Black nurses: Their service and their struggle. *American Journal of Nursing*, 76(3), 435–437.
- George, V. D., Bradford, D. M., & Battle, A. (2000). Yesterday, today, and tomorrow: Transitioning through time with the Cleveland Council of Black Nurses. *Nursing & Health Care Perspectives*, 21(5), 219–227.

- Goldstein, R. L. (1960). Negro nurses in hospitals. *American Journal of Nursing*, 60(2), 215–217.
- Mabel Staupers, who led battle to end prejudice, dies at 99. (1990). *American Journal of Nursing*, 9(2), 121.
- Mosley, M. O. P. (1995). Beginning at the beginning: A history of the professionalization of black nurses in America, 1908–1951. *Journal of Cultural Diversity*, 2(4), 101–109.
- Mosley, M. O. P. (1995). Despite all odds: A three-part history of the professionalization of black nurses through two professional nursing organizations, 1908–1955. *Journal of National Black Nurses Association*, 7(2), 10–20.
- Mosley, M. O. P. (1995). Mabel K. Staupers: A pioneer in professional nursing. *N & HC Perspectives on Community*, 16(1), 12–17.
- Mosley, M. O. P. (1996). A new beginning: The story of the National Association of Colored Graduate Nurses, 1908–1951. *Journal of National Black Nurses Association*, 8(1), 20–32.
- Smith, S. L. (1994). White nurses, black midwives, and public health in Mississippi, 1920–1950. *Nursing History Review*, 2, 29–49.
- Staupers, M. K. (1937). The Negro nurse in America. *Opportunity*, 15(11), 339–341.
- Staupers, M. K. (1961). *No time for prejudice: A story of the integration of Negroes in nursing in the United States*. New York, NY: MacMillan.
- Tucker-Allen, S. (1997). The founding of the Association of Black Nursing Faculty: My memories of the first five years. *ABNF Journal*, 8(4), 73–80.
- Washington, B. T. (1910). Looking through the years: 1910. Training colored nurses at Tuskegee. *American Journal of Nursing*, 11, 167–171. (Reprinted by permission in *Creative Nursing: A Journal of Values, Issues, Experience & Collaboration*, 3(1), 16, 1997.)
- Wilkins, R. (1943). Black women in white. *Negro Digest*, 1(6), 61–63.

By 1917, the emerging nursing profession was driven by two significant events that dramatically increased the need for additional trained nurses in the United States: World War I and the influenza epidemic. Nightingale's work and the devastation of the Civil War had firmly established the need for nursing care in war. Mary Adelaide Nutting, who became a professor of nursing and health at Columbia University, chaired the newly established Committee on Nursing in response to the call for more nurses as the United States entered the war in Europe. U.S. nurses realized early on that World War I was unlike previous wars: It was a global conflict that involved coalitions of nations against nations, involving vast amounts of supplies and demanding the organization of all the nation's resources for military purposes (Kalisch & Kalisch, 1986). Along with **Lillian Wald** and **Jane A. Delano**, director of nursing in the American Red Cross, Nutting initiated a national

publicity campaign to recruit young women to enter nurse training. The Army School of Nursing, headed by **Annie Goodrich** as dean, and the Vassar Training Camp for Nurses prepared nurses for the war and for home nursing and hygiene nursing through the Red Cross (Dock & Stewart, 1931). The Committee on Nursing estimated that there were at most 200,000 active "nurses" in the United States at the beginning of World War I, both trained and untrained, which was inadequate to support the military effort abroad (Kalisch & Kalisch, 1986). At home, the influenza epidemic of 1917–1919 led to increased public awareness of the need for public health nursing and public education about hygiene and disease prevention.

The successful campaign to attract nursing students focused heavily on patriotism, which ushered in the new era for nursing as a profession. By 1918, nursing school enrollments were up by 25%. In 1920, Congress passed

a bill that provided nurses with military rank (Dock & Stewart, 1931). Following close behind, the passage of the 19th Amendment to the U.S. Constitution granted women the right to vote. According to Stewart (1921):

Probably the greatest contribution of the war experience to nursing lies in the fact that the whole system of nursing education was shaken for a little while out of its well-worn ruts and brought out of its comparative seclusion into the light of public discussion and criticism. When so many lives hung on the supply of nurses, people were aroused to a new sense of their dependence on the products of nursing schools, and many of them learned for the first time of the hopelessly limited resources which nursing educators have had to work with in the training of these indispensable public servants. Whatever the future may bring, it is unlikely that nursing schools will willingly sink back again into their old isolation or that they will accept unquestionably the financial status which the older system imposed on them. (p. 6)

While nursing as a profession was emerging in the United States, it remained a “white, female only” career choice during these early years. Men and minorities were excluded from the field, and those who wanted to enter nursing school found themselves essentially “locked out.” Eventually, quotas were established in select nursing programs to permit African Americans’ and other minorities’ admission. Even when these nurses graduated, they had very few employment opportunities owing to segregationist policies of hospitals and other health agencies. Males faced the same challenges, and eventually schools of nursing were developed specifically for male nurse training. Early roles for male nurses were limited to psychiatric facilities, where their strength and larger stature were considered advantages in dealing with these populations.

These early discriminatory policies reflected the era but were also patterned after Nightingale’s belief that nursing was best suited for women and their nurturing instinct. Nightingale did not write specifically about the inclusion of minorities in the nursing profession. However, as indicated by her attitude toward Mary Seacole (as discussed earlier in this chapter), she seemed to have a preference for white female nurses as the face of the emerging profession of nursing.

## The Emergence of Community and Public Health Nursing

The pattern for health visiting and district nursing practice outside the hospital was similar in the United States to that in England (Roberts, 1954). U.S. cities were besieged by overcrowding and epidemics after the Civil War. The

need for trained nurses evolved as in England, and schools throughout the United States developed along the Nightingale model. Visiting nurses were first sent to philanthropic organizations in New York City (1877), Boston (1886), Buffalo (1885), and Philadelphia (1886) to care for the sick at home. By the end of the century, most large cities had some form of visiting nursing program, and some headway was being made even in smaller towns (Heinrich, 1983). Industrial or occupational health nursing was first started in Vermont in 1895 by a marble company interested in the health and welfare of its workers and their families. Tuberculosis (TB) was a leading cause of death in the 19th century; nurses visited patients bedridden from TB and instructed persons in all settings about prevention of the disease (Abel, 1997).

### Lillian Wald, Public Health Nursing, and Community Activism

Lillian Wald, a wealthy young woman with a great social conscience, graduated from the New York Hospital School of Nursing in 1891 and is credited with creating the title “public health nurse.” After a year working in a mental institution, Wald entered medical school at Woman’s Medical College in New York. While in medical school, she was asked to visit immigrant mothers on New York’s Lower East Side and instruct them on health matters (see **Box 3-2**). Wald was appalled by the conditions there. During one now famous home visit, a small child asked Wald to visit her sick mother.



And the rest, as they say, is history. According to Wald: “Nursing is love in action and there is no finer manifestation of it than the care of the poor and disabled in their own homes” (Wald, 1915, p. 14). What Wald found changed her life forever and secured a place for her in American nursing history. Wald said, “all the maladjustments of our social and economic relations seemed epitomized in this

### BOX 3-2 Lillian Wald Takes a Walk

From the schoolroom where I had been giving a lesson in bed-making, a little girl led me one drizzling March morning. She had told me of her sick mother, and gathering from her incoherent account that a child had been born, I caught up the paraphernalia of the bed-making lesson and carried it with me.

The child led me over broken roadways . . . between tall, reeking houses whose laden fire-escapes, useless for their appointed purpose, bulged with household goods of every description. The rain added to the dismal appearance of the streets and to the discomfort of the crowds which thronged them, intensifying the odors which assailed me from every side. Through Hester and Division Streets we went to the end of Ludlow; past odorous fish-stands, for the streets were a market-place, unregulated, unsupervised, unclean, past evil-smelling, uncovered garbage cans . . .

All the maladjustments of our social and economic relations seemed epitomized in this brief journey and what was found at the end of it. The family to which the child led me was neither criminal nor vicious. Although the husband was a cripple, one of those who stand on street corners exhibiting deformities to enlist compassion, and masking the begging of alms by a pretense of selling, although the family of seven shared their two rooms with boarders—who were literally boarders, since a piece of timber was placed over the floor for them to sleep on—and although the sick woman lay on a wretched, unclean bed, soiled with a hemorrhage two days old, they were not degraded human beings, judged by any measure of moral values.

In fact, it was very plain that they were sensitive to their condition, and when, at the end of my ministrations, they kissed my hands (those who have undergone similar experiences will, I am sure, understand), it would have been some solace if by any conviction of the moral unworthiness of the family I could have defended myself as a part of a society which permitted such conditions to exist. Indeed, my subsequent acquaintance with them revealed the fact that miserable as their state was, they were not without ideals for the family life, and for society, of which they were so unloved and unlovely a part.

That morning's experience was a baptism of the fire. Deserted were the laboratory and the academic work of the college. I never returned to them. On my way from the sick-room to my comfortable student quarters my mind was intent on my own responsibility. To my inexperience it seemed certain that conditions such as these were allowed because people did not know, and for me there was a challenge to know and to tell. When early morning found me still awake, my naive conviction remained that, if people knew things—and "things" meant everything implied in the condition of this family—such horrors would cease to exist, and I rejoiced that I had a training in the care of the sick that in itself would give me an organic relationship to the neighborhood in which this awakening had come.

Source: Wald, L. D. (1915). *The House on Henry Street*. New York, NY: Henry Holt and Company.

brief journey" (p. 6). Wald was profoundly affected by her observations; she and her colleague, **Mary Brewster**, quickly established the **Henry Street Settlement** in this same neighborhood in 1893. She quit medical school and devoted the remainder of her life to "visions of a better world" for the public's health.

This effort later evolved into the Visiting Nurse Service of New York City, which laid the foundation for the establishment of public health nursing in the United States. The health needs of the population were met through addressing social, economic, and environmental determinants of health, in a pattern after Nightingale. The nurses helped educate families about disease transmission and stressed the importance of good hygiene. They provided preventive, acute, and long-term care. As such, the Henry Street Settlement went far beyond the care of the sick and the prevention of illness: It aimed at rectifying those causes that led to the poverty and misery.

Wald was a tireless social activist for legislative reforms that would provide a more just distribution for the marginal and disadvantaged in the United States (Donahue,

1985). She began her work with 10 nurses in 1893, which grew to 250 nurses serving 1,300 patients each day by 1916. During this same period, the budget for the service grew from nothing to more than \$600,000 per year, all from private donations.

Wald hired African American nurse **Elizabeth Tyler** in 1906, which evidenced her commitment to cultural diversity. Although unable to visit white patients, Tyler made her own way by "finding" African American families who needed her service. In 3 months, Tyler had so many African American families in her caseload that Wald hired a second African American nurse, Edith Carter. Carter remained at Henry Street for 28 years until her retirement (Carnegie, 1991).

During her tenure at Henry Street, Wald demonstrated her commitment to racial and cultural diversity by employing 25 African American nurses over the years, and she paid them salaries equal to white nurses, and provided identical benefits and recognition to minority nurses (Carnegie, 1991). This practice was exceptional during the early part of the 20th century, a time when African American nurses were often denied admission to white schools



of nursing and membership in professional organizations and were denied opportunities for employment in most settings. Because hospitals of this era often set quotas for African American patients, those nurses who managed to graduate from nursing schools found themselves with few patients who needed or could afford their services. African American nurses struggled for the right to take the registration examination available to white nurses.

Wald submitted a proposal to the city of New York after learning of a child's dismissal from a New York City school for a skin condition. Her proposal was for one of the Henry Street Settlement nurses to serve for free for 1 month in a New York school. The results of her experiment were so convincing that salaries were approved for 12 school nurses. From this beginning, school nursing was born in the United States and became one of many community specialties credited to Wald (Dietz & Lehozky, 1963).

In 1909, Wald proposed a program to the Metropolitan Life Insurance Company to provide nursing visits to its industrial policyholders. Statistics kept by the company documented the lowered mortality rates of policyholders attributed to the nurses' public health practice and clinical expertise. The program demonstrated savings for the company and was so successful that it lasted until 1953 (Hamilton, 1988).

### RESEARCH ALERT



Three exceptional African American nurses—Jessie Sleet, Elizabeth Tyler, and Edith Carter—are considered pioneers in community health nursing. This research article details how these three African American community health nurses made significant contributions to the development of New York City's community health nursing by providing much-needed health care to unserved members of the African American community (1900–1937). They provided strong leadership in diverse roles such as supervisors, administrators, and educators in patients' homes, babies' health stations, settlement houses, and clinics. Their work occurred during a period of rapid industrialization, immigration, and great population growth in the midst of teeming slums, diseases, and death. In community health nursing history, it was a period of establishment, activism, expansion, and development. For these African American nurse pioneers, it was a time of significant challenges and growth. They faced educational, professional, and racial barriers and increased mortality among people of their own race. This research chronicles their brave and skilled efforts to transcend these barriers and improve the health of African American citizens during the early part of the 20th century.

Source: Mosley, M. O. (1996). Satisfied to carry the bag: Three black community health nurses' contributions to health care reform, 1900–1937. *Nursing History Review*, 4, 65–82.

Wald's other significant accomplishments include the establishment of the Children's Bureau, set up in 1912 as part of the U.S. Department of Labor. She was also an enthusiastic supporter of and participant in women's suffrage, lobbied for inspections of the workplace, and supported her employee, Margaret Sanger, in her efforts to give women the right to birth control. She was active in the American and International Red Cross and helped form the Women's Trade Union League to protect women from sweatshop conditions.

Wald first coined the phrase "public health nursing" and transformed the field of community health nursing from the narrow role of home visiting to the population focus of today's community health nurse (Robinson, 1946). According to Dock and Stewart (1931), the title of "public health nurse" was purposeful: The role designation was designed to link the public's health to governmental responsibility, not private funding. As state departments of health and local governments began to employ more and more public health nurses, their role increasingly focused on prevention of illness in the entire community. A distinction was made between the visiting nurse, who was employed by the voluntary agencies primarily to provide home care to the sick, and the public health nurse, who concentrated on preventive measures (Brainard, 1922). Early public health nurses came closer than hospital-based nurses to the autonomy and professionalism that Nightingale advocated. Their work was conducted in the unconfined setting of the home and community, they were independent, and they enjoyed recognition as specialists in preventive health (Buhler-Wilkerson, 1985). Public health nurses from the beginning were much more holistic in their practice than their hospital counterparts. They were involved with the health of industrial workers, immigrants, and their families, and were concerned about exploitation of women and children. These nurses also played a part in prison reform and care of the mentally ill (Heinrich, 1983).

Considered the first African American public health nurse, **Jessie Sleet Scales** was hired in 1902 by the Charity Organization Society, a philanthropic organization, to visit African American families infected by TB. Scales provided district nursing care to New York City's African American families and is credited with paving the way for African American nurses in the practice of community health (Mosley, 1996).

### Dorothea Lynde Dix

**Dorothea Lynde Dix**, a Boston schoolteacher, became aware of the horrendous conditions in prisons and mental institutions when asked to conduct a Sunday school class in the House of Correction at Cambridge, Massachusetts. She was

appalled at what she saw and went about studying if the conditions were isolated or widespread; she took 2 years off to visit every jail and almshouse from Cape Cod to the Berkshire Mountains (Tiffany, 1890, p. 76). Her report was devastating. Boston was scandalized by the reality that the most progressive state in the union was now associated with such horrible conditions. The shocked legislature voted to allocate funds to build hospitals. For the rest of her life, Dorothea Dix stood out as a tireless zealot for the humane treatment of the insane and imprisoned. She had exceptional savvy in dealing with legislators: She acquainted herself with the legislators and their records and displayed the “spirit of a crusader.” For her contributions, she is considered one of the pioneers of the reform movement in the United States, and her efforts are felt worldwide to the present day (Dietz & Lehozky, 1963).

Dix was also known for her work in the Civil War, having been appointed superintendent of the female nurses of the Army by the secretary of war in 1861. Her tireless efforts led to the recruitment of more than 2,000 women to serve in the Army during the Civil War. Officials had consulted Florence Nightingale concerning conditions in military hospitals and were determined not to make the same mistakes. Dix enjoyed far more sweeping powers than Nightingale, in that she had the authority to organize hospitals, to appoint nurses, and to manage supplies for the wounded (Brockett & Vaughan, 1867). Among her most well-known nurses during the Civil War were the poet Walt Whitman and the author Louisa May Alcott (Donahue, 1985).

## UNN04 FPO

### Clara Barton

The idea for the International Red Cross was the brainchild of a Swiss banker, J. Henri Dunant, who proposed the formation of a neutral international relief society that could be activated in time of war. The International Red Cross was ratified by the Geneva Convention on August 22, 1864.

**Clara Barton**, through her work in the Civil War, had come to believe that such an organization was desperately needed in the United States. However, it was not until 1882 that Barton was able to convince Congress to ratify the Treaty of Geneva, thus becoming the founder of the American Red Cross (Kalisch & Kalisch, 1986). Barton also played a leadership role in the Spanish–American War in Cuba, where she led a group of nurses to provide care for both U.S. and Cuban soldiers and Cuban civilians. At the age of 76, Barton went to President McKinley and offered the help of the Red Cross in Cuba. McKinley agreed to allow Barton to go with Red Cross nurses, but only to care for the Cuban citizens. Once in Cuba, the U.S. military saw what Barton and her nurses were able to accomplish with the Cuban military, and American soldiers pressured military officials to allow Barton’s help. Along with battling yellow fever, Barton was able to provide care to both Cuban and U.S. military personnel and eventually expanded that care to Cuban citizens in Santiago. One of Barton’s most famous patients was young Colonel Teddy Roosevelt, who later became the president of the United States.

Barton became an instant heroine both in Cuba and in the United States for her bravery, tenaciousness, and organized services for the military and civilians torn apart by war. On August 13, 1898, the Spanish–American War came to an end. The grateful people of Santiago, Cuba, built a statue to honor Clara Barton in the town square, where it stands to this day. Tales of the work of Barton and her Red Cross nurses were spread through the newspapers of the United States and in the schools of nursing. A congressional committee investigating the work of Barton’s Red Cross staff applauded the work of these nurses and recommended that the U.S. Medical Department create a permanent reserve corps of trained nurses. These reserve nurses became the Army Nurse Corps in 1901.

Barton also led the disaster recovery of the deadliest natural disaster in U.S. history, which surpassed even the recent Hurricane Katrina in its devastating death toll. On September 8, 1900, before hurricanes were even named, a vast storm with wind speeds exceeding 140 miles per hour blew into Galveston Bay. In 24 hours, wind and water had killed an estimated 6,000 people and destroyed an estimated 6,000 buildings. There was no federal help or resources, and the grieving survivors were faced with a federal government that “didn’t do” relief for disasters. The only resources came from outside private donors, churches, and philanthropic organizations—and Clara Barton and her Red Cross nurses. One-sixth of the city’s population was dead, and the sandbar of Galveston had no place to bury them. Clara Barton arrived on the scene quickly, and she organized efforts to comfort the survivors and provide healthcare services and community-based relief (Baker, 2006).

Clara Barton will always be remembered both as the founder of the American Red Cross and the driving force behind the creation of the Army Nurse Corps.

### Birth of the Midwife in the United States

Women have always assisted other women in the birth of babies. These “lay midwives” were considered by communities to possess special skills and somewhat of a “calling.” With the advent of professional nursing in England, registered nurses became associated with safer and more predictable childbirth practices. In England and in other countries where Nightingale-system nurses were prevalent, most registered nurses were also trained as midwives with a 6-month specialized training period. In the United States, the training of registered nurses in the practice of midwifery was prevented primarily by physicians. U.S. physicians saw midwives as a threat and an intrusion into medical practice. Such resistance indirectly led to the proliferation of “granny wives” who were ignorant of modern practices, were untrained, and were associated with high maternal morbidity (Donahue, 1985).

The first organized midwifery service in the United States was the **Frontier Nursing Service** founded in 1925 by **Mary Breckenridge**. Breckenridge graduated from St. Luke’s Hospital Training School in New York in 1910 and received her midwifery certificate from the British Hospital for Mothers and Babies in London in 1925. She had extensive experience in the delivery of babies and midwifery systems in New Zealand and Australia. In rural Appalachia, babies had been delivered for decades by granny midwives, who relied mainly on tradition, myths, and superstition as the bases of their practice. For example, they might use ashes for medication and place a sharp axe, blade up, under the bed of a laboring woman to “cut” the pain. The people of Appalachia were isolated because of the terrain of the hollows and mountains, and roads were limited to most families. They also had one of the highest birth rates in the United States. Breckenridge believed that if a midwifery service could work under these conditions, it could work anywhere (Donahue, 1985).

Breckenridge had to use English midwives for many years and only began training her own midwives in 1939, when she started the Frontier Graduate School of Nurse Midwifery in Hyden, Kentucky, with the advent of World War II. The nurse midwives accessed many of their families on horseback. In 1935, a small 12-bed hospital was built at Hyden and provided delivery services. The nurse midwives under the direction of Breckenridge were successful in lowering the highest maternal mortality rate in the United States (in Leslie County, Kentucky) to substantially

below the national average. These nurses, as at the Henry Street Settlement, provided health care for everyone in the district for a small annual fee. A delivery was assessed an additional small fee. Nurse midwives provided primary care, prenatal care, and postnatal care, with an emphasis on prevention (Wertz & Wertz, 1977).

The “Roaring Twenties” ushered American women—newly armed with the right to vote—into the new freedom of the “flapper era”—shrinking dress hemlines, shortened hairstyles, and the increased use of cosmetics. Hospitals were used by greater numbers of people, and the scientific basis of medicine became well established as most surgical procedures were done in hospitals. Penicillin was discovered in 1928, creating a revolution in the prevention of infectious disease deaths (Donahue, 1985; Kalisch & Kalisch, 1986). The previously mentioned Goldmark Report recommended the establishment of college- and university-based nursing programs.

Mary D. Osborne, who functioned as supervisor of public health nursing for the state of Mississippi from 1921 to 1946, had a vision for a collaboration with community nurses and granny midwives, who delivered 80% of the African American babies in Mississippi. The infant and maternal mortality rates were exceptionally high among African American families, and these granny midwives, who were also African American, were untrained and had little education.

Osborne took a creative approach to improving maternal and infant health among African American women. She developed a collaborative network of public health nurses and granny midwives in which the nurses implemented training programs for the midwives, and the midwives in turn assisted the nurses in providing a higher standard of safe maternal and infant health care. The public health nurses used Osborne’s book, *Manual for Midwives*, which contained guidelines for care and was used in the state until the 1970s. They taught good hygiene, infection prevention, and compliance with state regulations. Osborne’s innovative program is credited with reducing the maternal and infant mortality rates in Mississippi and in other states where her program structure was adopted (Sabin, 1998).

### The Nursing Profession Responds to the Great Depression and World War II

With the stock market crash of 1929 came the Great Depression, which resulted in widespread unemployment of private-duty nurses and the closing of nursing schools, while simultaneously creating an increasing need for charity health services for the population. Nursing students, who had previously been the primary source of staff for

hospitals, became scarcer. Unemployed graduate nurses were hired to replace them for minimal wages, a trend that was to influence the profession for years to come (MacEachern, 1932).

Other nurses found themselves accompanying troops to Europe as the United States entered World War II. Military nurses were a critical presence at the invasion of Normandy in 1938, as well as in North Africa, Italy, France, and the Philippines, where Navy nurses provided care aboard hospital ships. More than 100,000 nurses volunteered and were certified for military service in the Army and Navy Nurse Corps.

The resulting severe shortage of nurses on the home front resulted in the development of the **Cadet Nurse Corps**. **Frances Payne Bolton**, a Congresswoman from Ohio, is credited with the founding of the Cadet Nurse Corps through the Bolton Act of 1945. By the end of the war, more than 180,000 nursing students had been trained through this Act, while advanced practice graduate nurses in psychiatry and public health nursing had received graduate education to increase the numbers of nurse educators (Donahue, 1985; Kalisch & Kalisch, 1986).

Ernie Pyle, a famous correspondent in World War II, offered Americans a “front-seat view” of the war through his detailed journalistic accounts of daily life on the front. Pyle was the first journalist who put his own life in danger by reporting from the battlefield; he spent a great deal of time with soldiers during active combat and was killed during a sniper attack in Ie Shima, Japan, in 1942. Chaplain Nathan Baxter Saucier was assigned to retrieve his body, conduct his service, and assist the soldiers with building his coffin. The funeral service lasted only about 10 minutes. Pyle was buried with his helmet on, at Saucier’s request. The Navy, Marine Corps, and Army were all represented at the service. Pyle was a highly regarded and humanistic voice for those serving America during World War II. Here is an example of his accounts of life for nurses in a field hospital in Europe:

The officers and nurses live two in a tent on two sides of a company street—nurses on one side, officers on the other. . . . The nurses wear khaki overalls because of the mud and dust. Pink female panties fly from a line among the brown warlike tents. On the flagpole is a Red Cross flag made from a bed sheet and a French soldier’s red sash. The American nurses—and there were lots of them—turned out just as you would expect: wonderfully. Army doctors and patients too were unanimous in their praise of them. . . . Doctors told me that in the first rush of casualties they were calmer than the men. For the first ten days they had to live like

animals, even using open ditches for toilets but they never complained. One nurse was always on duty in each tentful of 20 men. She had medical orderlies to help her. The touch of femininity, the knowledge that a woman was around, gave the wounded man courage and confidence and a feeling of security. (Pyle, 1944)

During the midst of the Depression, many nurses found that the expansion and advances in aviation opened up a new field for nurses. In an effort to increase the public’s confidence in the safety of transcontinental air travel, nurses were hired in the promising new role of “nurse-stewardess” (Kalisch & Kalisch, 1986). Congress created an additional relief program, the Civil Works Administration (CWA), in 1933 that provided jobs to the unemployed, including placing nurses in schools, public hospitals and clinics, public health departments, and public health education community surveys and campaigns.

The Social Security Act of 1935 was also passed by Congress to provide old-age benefits, rehabilitation services, unemployment compensation administration, aid to dependent and/or disabled children and adults, and monies to state and local health services. The Social Security Act included Title VI, which authorized the use of federal funds for the training of public health personnel. This led to the placement of public health nurses in state health departments and the expansion of public health nursing as a viable career path.

While nurses were forging new paths for themselves in various fields, Hollywood began featuring nurses in films during the 1930s. The only feature-length films to ever focus entirely on the nursing profession were released during this decade. *War Nurse* (1930), *Night Nurse* (1931), *Once to Every Woman* (1934), *The White Parade* (1934, Academy Award nominee for Best Picture), *Four Girls in White* (1939), *The White Angel* (1936), and *Doctor and Nurse* (1937) all used nurses as major characters. During the bleak years of the economic depression, young women found these nurse heroines who promoted idealism, self-sacrifice, and the profession of nursing over personal desires particularly appealing. No longer were nurses depicted as subservient handmaidens who worked as nurses only as a temporary pastime before marriage (Kalisch & Kalisch, 1986).

### Early Education and Standardization of Practice of Public Health Nursing

After the turn of the century in the United States, infectious diseases such as smallpox, TB, malaria, cholera, and typhoid were practice priorities for public health nurses.



The public health nurse often initially detected an infectious disease, then referred those patients to physicians for treatment, provided follow-up care to patients when indicated, and tried through education and demonstrations to family and caregivers to prevent the spread of disease. Progress for early education efforts was largely gained through experience. A 3-month orientation and observation process was established in the early 1920s for nurses new to the concepts and policies of public health nursing. The philosophy was simple: Public health nursing was about prevention of disease, the promotion of health, care of the sick, and rehabilitation to productive life (Erickson, 1996).

By 1927, the Rockefeller Foundation provided private funding for a training station for health workers in conjunction with several local county health departments. Nurses, physicians, and sanitarians from many states and foreign countries received public health orientation and training through this initiative before it was discontinued in 1932. In 1929, the Rockefeller Foundation provided grants through the Rosenwald Fund designated for programs to improve the health and lower the death rates of the African American population in the South. These funds, used to establish permanent public health nursing positions for African American nurses, targeted children in areas where nursing and sanitation would make a profound impact on health and health practices (Forbes, 1946).

### Challenges of the 1930s

In 1933, President Roosevelt initiated the New Deal to relieve the economic hardship of the country. The Social Security Act in 1935 (Public Law No. 99-271) provided funding to increase public health programs, particularly to extend services and improve health care for mothers and children in rural areas suffering from economic stress. State boards of health secured funds in 1934 through the

Children's Bureau of the U.S. Department of Labor for state supervisory nurses, regional supervisory nurses, and local county nurses. The goal of this special project was to place at least one public health nurse in each county in every state. The efforts to reach this goal were remarkable, but qualified public health nurses continued to be few in number (Association of State and Territorial Directors of Nursing [ASTDN], 1993).

The U.S. Public Health Service (USPHS), under the nursing consultation of Pearl Melver, provided leadership in the development of public health nursing services to the states. This effort was encouraged by the National Organization of Public Health Nursing and the Nursing Section of the American Public Health Association. Joint efforts of the federal public health nurses and those who were becoming organized in the states became the impetus for the growth of the specialty of public health nursing (ASTDN, 1993).

Another provision of the Social Security Act of 1935 was the establishment of Crippled Children's Services. Through this initiative, public health nurses were trained in rehabilitation nursing, primarily in orthopedics. These nurses visited crippled children in their homes, held conferences with parents, and assisted in field clinics (Roberts, 1985a).

Syphilis had also been recognized as a major source of morbidity and mortality for many years. In 1938, the USPHS and state boards of health cooperated in a major project to attempt to conquer the disease through case finding, treatment, follow-up contact, and education. Public health nursing was in the vanguard of this effort. Educational conferences were planned so that all public health nurses would have an opportunity to attend. Prenatal screening of patients for syphilis was being introduced as a standard nursing intervention at this time. These efforts were particularly successful in the South (Erickson, 1940; **Box 3-3**).

#### BOX 3-3 Public Health Milestones of the 1920s and 1930s

1920s	Frost established epidemiology as science basic to community health	1930s	Association of State and Territorial Directors of Nursing formed
1920s	National Organization for Public Health Nursing formed	1930	Crippled Children's Programs established
1920s	Public Health Nursing Section of American Public Health Association formed	1930	National Institutes of Health established
1921	First federal monies allocated for health and social welfare	1935	Social Security Act passed
1923	Health Organization of League of Nations founded	1938	American Public Health Association set standards for school health
1925	Frontier Nursing founded		

Source: From Public Health Milestones in the 1920s and 1930s. APHA, 2006. Reprinted with permission from the American Public Health Association.

The country was gradually recovering from the Great Depression, and economic progress was accelerating. Farm production had broadened through diversification. New industries expanded the economy. The southern states, along with some of the eastern states, began to recognize the importance of nursing service in industrial hygiene programs. The U.S. Division of Industrial Hygiene asked for a public health nurse to plan and help institute nursing services. The prevention of disease, improvement of hazardous work conditions, promotion of health practices including nutrition, and first aid were the interventions to be provided through industrial nursing. As these nurses were employed, short-term educational and direct experience opportunities in areas with industrial nurses were planned so that the nurses could receive the best preparation possible for the role (Morton, Roberts, & Bender, 1993; Roberts, 1985a, 1985b; Smith, 1934).

### Progressive Initiatives After the War Years

By 1942, state boards of health and education began to enter operative agreements to strengthen public health nursing service to the school-age population. The role of the public health nurse in the school was generalized, but much emphasis was placed on health promotion, immunizations, nutrition, and correction of physical defects. Landmark legislation was passed by the U.S. Congress in March 1943, establishing the Emergency Maternity and Infant Care (EMIC) program for the care of the dependents of enlisted men of the U.S. armed services. The program was designed to provide for maternity care and acute illness care of the infants and was administered through the U.S. Children's Bureau. In less than a month, the program was initiated in almost all states. Training for public health nurses was once again funded by the federal government, and the role of the public health nurse expanded to include mothers and babies in a more formal way (ASTDN, 1935–1993).

The USPHS Division of Public Health Nursing conducted research during the mid-1940s to study public health nursing. The most significant recommendations included the designation of public health nursing in states as a major division of nursing, the recognition of public health nursing as a service delivery system to all public health divisions and programs, and the importance of educational and practice issues related to professional nursing. The studies cited a low educational level for public health nurses and strongly recommended upgrading educational qualifications. The studies critiqued the established expenditure of nursing time and activities, determining that many duties carried out by public health nurses could be delegated to clerical staff and health aides. Health aides were introduced to the public health team with high school

graduates employed to support public health nursing. These individuals quickly became a valuable resource and support to public health nursing, performing both clerical and clinical support activities (ASTDN, 1935–1993).

In December 1947, senior cadet nurses had a 6-month general training in public health and polio care through the training center of the state boards of health. The purpose of the Cadet Nurse Corps Program, funded through the USPHS, was to encourage young women to study nursing and to augment the supply of nurses in all health services.

Nurses were returning to work following the close of World War II, although the overall demand for nurses continued to exceed the supply. Newly constructed hospitals, industry, and public health agencies were all clamoring and vying for the short supply of nurses. While more active professional nurses and more students in schools existed by the early 1950s than at any previous time, the increase in numbers and caliber of nurses had not kept pace with the need for service (ASTDN, 1935–1993).

Throughout the 1950s, the nursing home industry began to emerge, with licensure requirements for standards of operation developed to ensure quality of services and care. Communities were accommodating an increase in the number of elderly persons living with chronic and degenerative diseases. Public health nurses provided training courses for nurses' aides employed in nursing homes. Country public health nurses regularly visited the nursing homes within their communities, providing TB skin testing, administering flu vaccines, and providing technical assistance in nursing care. Nutritionists and physical therapists provided additional expertise to improve care processes and support public health nurses in the areas of rehabilitation and nutrition (Hanlon & Pickett, 1974a, 1974b; Morton et al., 1993).

A national trend began in the 1960s to release psychiatric patients from institutional care as improved psychotropic drugs and treatment modalities were available. Inadequate staffing at the state mental health institutions as a result of the nursing shortage was a complicating factor. The National Institute of Mental Health funded projects to study the impact that public health nurses might have on mental health care. A mental health nurse consultant was employed by many states to spearhead the research efforts of these projects. The projects' public health nursing activity was defined as "aftercare" and was designed to determine the effectiveness of integrating follow-up services to mental health patients and their families into general public health nursing service. Public health nursing services included case finding and referral, hospital discharge planning, home and family assessments before and after discharge to the home, and medication monitoring

**BOX 3-4 Public Health Milestones of the 1940s and 1950s**

1940s	Public health programs focused on health needs of the war period	1950s	Policy emphases on health and federal funds for states, environmental health issues, housing, behavior, medical care, and children's health
1946	Centers for Disease Control and Prevention established by Congress	1950	Tuberculosis outpatient treatment becomes acceptable
1946	Mahoney introduced use of penicillin for treatment of syphilis	1950	Introduction of the Salk vaccine
1948	National Heart, Lung, and Blood Institute established	1950	White House Conference on Children and Youth
1948	World Health Organization established		

*Source:* From Public Health Milestones in the 1940s and 1950s. APHA, 2006. Reprinted with permission from the American Public Health Association.

(Amendt & White, 1965; Cottrell, 1948). Mental health services remained an integral part of public health service delivery throughout this decade, with new activities enhancing the communities' focus (**Box 3-4**).

Great emphasis was placed on child health, growth, and development in the early 1960s. Communicable disease, intestinal parasites, and physical defects that had been so prevalent in the school-age population were greatly diminished. Evaluations of this population found the new concerns to be dental and oral defects, vision and hearing defects, mental and emotional disturbances, accidents, and serious nutritional deficiencies. Continuing education was provided to enhance public health nurses' skills in observation, assessment, and nursing interventions in the care of children. Public health nurses began to be trained to assess developmental progress of children. Child health services provided by public health nurses included screening for physical defects, administration of immunizations, follow up to correct physical defects, referral for mental health evaluations, consultation with teachers, and health promotion in nutrition, accident prevention, and mental health (Roberts, 1985a).

An evaluation of the school health programs in the mid-1960s identified the need for additional nursing personnel to provide more direct preventive health services. Specialized federal funding through Title V grants was provided through the state departments of education to promote public health initiatives. Many schools recruited their nursing staff from the public health nursing workforce. Those public health nurses who went to schools took a broad view of child health and served as emissaries to school administrators and local boards' members. County public health nurses continued to serve as consultants to the schools in the areas of immunizations and communicable disease and as a referral source for Crippled Children's Services (Roberts, 1985a).

Immunizations administered by public health nurses were proving effective, yet surveys showed that many preschool and school-age children were not completely immunized. Boards of health, continuing their vigilance

regarding children's health status, received federal grants under the Vaccination Assistance Act. In 1965, public health nurses administered an increased number of immunizations. The oral polio vaccine, known as the Sabin vaccine, became available in a sugar cube administration form. A measles vaccine became available in 1966 and rubella in 1969. Following mass initial immunization campaigns for both measles and rubella, the new vaccines were incorporated into routine immunization schedules for children (ASTDN, 1935–1993).

By the mid-1960s, federal funding for maternal/child health services required the incorporation of contraceptive information and general reproductive health into public health services. The objective was to reduce maternal and infant mortality and to generally improve the health and wellbeing of mothers and children. Some states had already identified the health problems associated with multiple unplanned and unwanted pregnancies and had been early leaders in efforts to repeal federal and state laws restricting birth control services. By 1944, these efforts had resulted in integrated family planning counseling and issuing of select supplies with maternity and postpartum services into many of the county health departments. Contraceptive supplies at that time included condoms and diaphragms. However, because of the wide divergence of public opinion, the development of the program was slow and unpublicized (ASTDN, 1935–1993; Morton et al., 1993).

**Social and Political Influence of the 1960s and 1970s**

By 1965, county health departments routinely provided contraceptive counseling and supplies. Oral contraceptives were also available by this time and gave women more convenient and accepted choices. Public health nurses promoted family planning and were key in identifying women at highest risk and need for such services. Family planning nursing visits increased across the country. Eventually, the federal government appropriated monies for additional education of public health nurses to function as family planning nurse practitioners (NPs).

Landmark legislation in 1965 amended the Social Security Act of 1935 by establishing Medicare, a health insurance plan for people 65 years of age and older and for those with long-term disabilities. The insurance plan included reimbursement for intermittent skilled nursing services provided to homebound persons. The purpose of home health services was twofold. Healthcare costs were beginning to skyrocket; home care would reduce costly hospitalization stays with the added benefit of patients being in familiar home settings, enhancing quality of life. The goal of the program was to rehabilitate patients to their maximum potential and to teach families to care for the physical and emotional needs of patients.

Public health nurses had been providing home nursing services on a limited basis since the inception of public health nursing, but this would be the first reimbursement established for direct nursing services. In addition, the reimbursable home health nursing services to be provided would require public health nurses to learn new assessment and rehabilitative technical skills. Federal regulations established for certification were monumental, however. Continuing education for the nurses and nurses' aides who were directly providing care was just one of the regulations that in itself would be an immense task once service delivery was fully implemented (Buhler-Wilkerson, 1993; Erickson, 1996; Institute of Medicine [IOM], 1988).

Federal grants through the USPHS were made available to support the implementation of home health. Nurse consultants, supervising nurses, and staff nurses attended university-supported educational offerings in rehabilitation care and techniques. Educational workshops were designed to upgrade nursing skills and techniques in rehabilitative care and on the conditions of participation of home health services. Additional workshop topics included documentation of skilled care and nursing care plans, medication administration and side effects, and the disease processes of many chronic health conditions.



After federal costs studies were implemented by the public health nurses in home health care, it was demonstrated that additional auxiliary staff, including health aides and clerks, would allow public health nurses more time for nursing activities. Action was taken to create additional clerical and aide positions to support the nursing staff.

More liberal social values emerged, and the 1960s became known for having spawned a sexual revolution. These effects were recognized by the early 1970s. Communities were faced with tremendous increases in sexually transmitted diseases and teen pregnancy rates. Social programs in response to these increases were initiated in the 1960s and were formalized in public and community health efforts in all states. The establishment of Medicaid through the amendment to the Social Security Act, Title XIX, enhanced the delivery of healthcare services to a wider range of recipients. The quantity and variance of activities in public health nursing continued to increase.

All the while, the traditional programs of health protection and disease control moved forward, many with an accelerated pace. Collaboration with other agencies, institutions, and groups continued at a high level in an effort to coordinate resources to achieve the best possible public health service delivery. Medicaid programs enhanced the expansion of Crippled Children's Services as a payment mechanism for many previously uncovered services. Additional screening and specialty treatment clinics for neurology, heart, and orthopedics were established throughout the United States. Other initiatives also centered the delivery of child health services. Particularly in states with high infant mortality rates, state boards of health entered cooperative agreements in the 1970s to establish public health nursing positions in newborn intensive care units. The goal was to improve the communication, referral, and follow-up mechanisms for these high-risk infants after discharge from the hospital.

Title XIX of the Social Security Act (Medicaid) established Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) in 1969 to improve the access to preventive and primary health care for low-income children. State boards of health used this opportunity to strengthen the delivery of well-child services. These physical screenings were made available primarily by public health nurses and were reimbursable nursing services, another recognition of the value of public health nursing service. The Denver Developmental Screening Test (DDST) was incorporated into the physical assessment, giving public health nurses a new tool to help find potential developmental delays and provide early intervention in the newborn to 6-year age groups. Workshops and in-service programs were conducted to teach the DDST standardized procedures.



**BOX 3-5 Public Health Milestones of the 1960s and 1970s**

1960s	Public health policy issues focused on inequality, integration, poverty, "the pill," housing environmental health, consumer protection, human rights, and peace	1970	Occupational Safety and Health Administration established
1960	Tuberculosis sanatoriums phased out and mainstream treatment begun	1973	HMO Act passed
1961	First White House Conference on Aging	1976	National immunization program for "swine flu"
1961–1962	Sabin vaccine introduced	1978	Association of Community Health Nursing Educators formed
1962	National Institute of Child Health established	1979	Last outbreak of poliomyelitis in the United States
1964	<i>Surgeon General's Report on Smoking and Health</i> published	1979	First <i>Healthy People</i> report
1965	Medicaid and Medicare programs enacted	<i>Source:</i> From Public Health Milestones in the 1960s and 1970s. APHA, 2006. Reprinted with permission from the American Public Health Association.	
1970	<i>Roe v. Wade</i>		

Medical technology continued to advance rapidly, including advances in genetic diagnostics and treatment. Routine screening for sickle-cell anemia was introduced and was integrated with EPSDT services. Other genetic technological advances determined that a contributing factor to the high incidence of mental retardation resulted from genetic disorders such as hypothyroidism and phenylketonuria (PKU). Medication and dietary treatments were developed for these genetic disorders that would improve the quality of life and life expectancy. Nursing interventions included a home assessment, treatment modalities ordered by the attending physician, provision of dietary supplements, and teaching basic child health care and special health care based on the genetic diagnosis derived from the screening (ASTDN, 1935–1993; Hanlon & Pickett, 1974b). Please refer to **Box 3-5** for milestones of the 1960s and 1970s.

A dramatic increase in home health nursing visits began at the close of the 1970s as a result of Medicare's implementation of diagnosis-related groups (DRGs), which were designed to lower costs through reduced institutionalization. Medicaid also reimbursed for home health services to eligible individuals not on Medicare and for some children with special healthcare needs. Private medical insurance plans and the Veteran's Administration were beginning to reimburse for home health services as well. Additional nursing positions were essential to meet the demand and to balance the quantity relationship with quality nursing care. As more acutely ill patients were cared for in the home and more advanced technological care was introduced into home health care, this specialty increased (ASTDN, 1935–1993).

**Public Health Nursing Services in the 1980s and 1990s**

As the 1980s began, the United States was experiencing an economic recession with skyrocketing interest rates

and rising unemployment rates. National leadership was reducing funding for many of the social programs begun in the 1960s; the philosophy was that less governmental spending would enhance the national economy. The increased number of homeless persons became a national concern. Continuing concerns included illicit drug use, rising teen pregnancy rates, and alterations in family unit structures. Inadequate healthcare resources were also a continuing concern requiring cost containment, management of resources, and careful evaluation and incorporation of advancing technology. During this era, public health nursing services became varied throughout the country. In some states, basic services included both traditional preventive health services and family health services directed at high-risk mothers and babies and a reduction of unplanned pregnancies (ASTDN, 1935–1993).

Fortunately, public health nursing continued to grow and was a strong workforce in the country by the 1980s. Infant death rates declined significantly. Public health nurses participated in many research studies on public health problems such as congenital syphilis and TB preventive studies. Federal funding requirements changed from categorical grants to block grants. Categorical funding of the 1960s and 1970s had required that resources be restricted to the program that funded the resource; a nursing position funded by family planning, for example, was limited to family planning activities. Block funding allowed agencies more discretion on the use of these funds; therefore, services could be offered more efficiently to the public. Integrated public health nursing delivery systems were born. The integration of services allowed public health nurses to return to the more patient-oriented or family-oriented care that had been the traditional philosophy of public health nursing (ASTDN, 1993; Buhler-Wilkerson, 1993).

Genetics screening programs expanded as a result of advanced technology in the early 1980s. The first initiative was newborn screening for sickle-cell anemia. The goal was early detection of disease because early intervention could prevent common infections or premature deaths. State legislatures mandated hospitals to collect newborn screening specimens before infant discharge from the hospital. Screening included at least three genetic disorders: sickle-cell anemia, PKU, and hypothyroidism. Public health nurses were given the responsibility for following up with the newborns with a questionable or positive screen. Questionable screens for PKU and hypothyroidism require prompt attention because early treatment with diet and/or medication will prevent irreversible mental retardation and growth delay. The availability of public health nurses provided an effective means for timely follow up of screenings and for the implementation of medical and nursing care plans when indicated (ASTDN, 1993).

A crucial indicator of any state's quality of life is infant mortality. Public health nursing became a viable resource during the 1980s for delivering services (either personal or preventive) aimed at reducing infant mortality. The major cause of infant mortality was prematurity. Contributing factors included poor nutrition, smoking, teen pregnancy, and inadequate prenatal care. Socioeconomic factors such as inadequate housing, drug abuse, and lack of education were also contributing factors. Maternal risk scoring and documentation to ensure referrals to appropriate levels of care were standards of care. Tracking systems were intensified to ensure adequate levels of care.

Family planning services during the 1980s were also identified as a priority to reduce infant mortality. Risk factors included age and/or inadequate income to purchase contraceptive supplies. Public health nurses continued to promote family planning services, provide health promotion and education in their communities, and intensify tracking systems of teens and others at risk. The Special Supplemental Food Program for Women, Infants, and Children (WIC) continued to address infant mortality. WIC certification and nutrition education were integrated into maternal and child health nursing services' standards of care.

Congressional authorization gave states the option to expand their Medicaid programs in 1987. The services' expansion included case management of high-risk mothers and infants to ensure comprehensive care as a reimbursable service. Nutritionists, social workers, and public health nurses formed teams to establish care plans and assume case manager roles based on the patient's risk factors. Public health nursing activities included nursing assessments, home visits, health education, and communication

with medical providers in an effort to improve the overall status of this high-risk population. Documentation of the care process was essential for continuity of care from the initial assessment and plan of care through implementation of services and ongoing evaluation.

*Case management* emerged during this decade as a new term, but the concept and the related activities of case management were the principles and foundations upon which public health nursing practice had been built. **Case management** is a program for intensive individual supervision, follow up, and referrals to appropriate levels of care. Public health nurses had been providing a form of case management through the years to many patients, such as those receiving TB treatment, those receiving home health services, and children with special healthcare needs.

School health nurses also became stronger in this era. School nurses strengthened the educational process of students by assisting them in improving or adapting to their health status. School nurses were available during school hours to serve as counselors and to provide case finding and referral to physicians, health departments, and other agencies as appropriate to meet the needs of school-age children. Activities included general health screening and referral, hearing and vision screening, identification of suspected abuse and neglect, substance abuse counseling, and appropriate decision making and support. In addition, school nurses provided classroom presentations on health issues and provided emergency care for injuries and illnesses at school.

Communicable disease had renewed public health interest in the nation throughout the 1980s. TB case rates were increasing. Measles cases were being reported among college-age students. New communicable disease concerns emerged in the 1980s, including increased incidence of hepatitis B, human immunodeficiency virus (HIV) infection, and acquired immune deficiency syndrome (AIDS). Case conferences with private medical consultants were established on a district level for initiation and ongoing review of treatment plans carried out by public health nurses. Drug resistance and failure to take medication were identified as major hindrances to individual cure and subsequent eradication of TB. In 1986, public health nurses initiated directly observed therapy (DOT) for TB cases. Rather than self-administration, patients would present to the health department or the public health nurse would visit the home for administration of medications. Later in the decade, public health officials recognized that the increase in TB cases was, in part, associated with the emerging HIV and AIDS cases. HIV screening became a standard of nursing care for all active TB cases.

Many states took an early stance to address measles among the college-age population in the mid-1980s as

a result of the increased incidence of disease reported throughout the nation. The college-age population was at greatest risk for disease because they had been immunized with less-than-effective immunizations in the late 1960s or had not received the immunization. Collaboration with state college boards resulted in requirement of measles and rubella immunity for college admission. Public health nurses reviewed immunization records, provided screening tests when indicated, and administered immunizations to assist in the control of measles.

The first cases of AIDS were diagnosed in the early 1980s. Research soon unraveled part of the mystery of the disease. Risk factors for transmission of disease were identified, and a screening test for HIV, the virus that leads to AIDS, became available. Screening provided a means to detect HIV infection earlier and to provide appropriate counseling and education to alter risk behaviors and reduce transmission. Education of the public and high-risk individuals was the only effective weapon that public health had to address this disease. Public health nurses attended educational workshops to gain knowledge and skills for testing and counseling patients who requested testing. Health education materials were developed to support counseling and educational strategies. In addition, public health nurses implemented standards of care by integrating assessment of risk factors for patients receiving other public health services and by disseminating information through public presentations in schools and community organizations.

Progress continued for public health nurses during this era, yet dilemmas remain. A national nursing shortage was recognized, with all states feeling the effects. Public health felt the effects of the nursing shortage greatly, with the vacancy rates reaching 20% at times. A commission on nursing was organized by the Secretary of the U.S. Department of Health and Human Services (HHS) to examine and make recommendations regarding the nursing shortage. The commission's report, completed in 1989, cited the reality of the shortage and the impact on healthcare delivery. The shortage was determined to be the result of the increasing demand for nurses, and the report urged agencies to be attentive to using measures aimed at reducing the barriers to effective recruitment and retention (HHS, 1988).

One of the commission's recommendations was that nursing should have greater representation in the policy and decision-making activities of healthcare institutions. Acting on this recommendation, both public health nurses and their administrations developed mechanisms whereby public health nurses moved into broader policy-making roles. At the close of the decade, public health nursing continued as a strong force in the delivery of health care in many states and in health promotion and disease

prevention in others. Public health nurses were instrumental in establishing and integrating new initiatives in public health to combat old public health problems and to address new public health concerns. The value of public health nursing activities continued to be recognized as reimbursement for selected activities and NP services were expanded.

The federal government's staggering budget deficits were the major national focus as the 1990s began. Healthcare costs were escalating, and governmental measures attempting to control increasing costs were not proving effective. The gloomy financial picture was exacerbated by Desert Storm, the U.S. military troops' assignment by President George H. W. Bush to protect Saudi Arabia and to retaliate for Iraq's invasion of Kuwait.

Current and emerging healthcare issues of the 1990s lay close to the heart of public health. The percentage of the population older than 65 continued to rise. Life expectancy in the United States had risen from 47 years in 1900 to 75 years in 1990. Infant mortality, although significantly declining through the years, required continued vigilance. The increased incidence of syphilis and other sexually transmitted diseases was of chief concern to public health. The number of persons infected with HIV and/or diagnosed with AIDS was increasing at alarming rates. Substance abuse continued to be a major problem, with studies identifying it as a contributing factor in 50% of all traffic accidents, in the transmission of HIV infection, and in infant morbidity and mortality.

Yet federal funding reductions were inevitable for public health as a result of the sluggish national economy as the United States entered the 1990s. Without significant infusions of money for additional staff, medications, vaccines, and health promotion/disease prevention activities, states faced increases in preventable diseases and deaths and a reversal of the recent favorable trends in lowering infant mortality and teen pregnancy. Difficult economic times resulted in the careful reviews of resources and the utilization of those resources. Focus was again directed toward enhancing nursing education and staff development, strengthening relationships with schools of nursing, and developing a quality assurance process for the integration of public health nursing services. Because of the large number of nurses employed, public health nurses were afforded greater access to approved continuing education opportunities specific to their area of practice. Select continuing education offerings, including TB updates, HIV testing and counseling courses, and community assessment, became required orientation for newly employed public health nurses (Gebbie, 1996).

The nation experienced a significant increase in the incidence of syphilis. Case rates were climbing and were

**BOX 3-6 Public Health Milestones of the 1980s and 1990s**

1980s	Public policy centered around AIDS, Medicare, Medicaid, tobacco control, international health, minority health, national healthcare reform, and national health objectives	1990	<i>Healthy People 2000</i> report published
1982	Warning labels on aspirin for Reye's syndrome prevention	1991	<i>Healthy Communities 2000: Model Standards</i> published
1986	First anti-tobacco initiative by public health community	1993	AZT sanctioned as able to reduce perinatal HIV
1988	<i>The Future of Public Health</i> published by the Institute of Medicine	1996	<i>War and Public Health</i> published
1989	<i>Year 2000 Health Objectives</i> published	1997	Plans underway for modern microbiological/bio-medical laboratory capabilities
		2000	<i>Healthy People 2010</i> published

*Source:* From Public Health Milestones in the 1980s and 1990s. APHA, 2000. Reprinted with permission from the American Public Health Association.

higher than they had been since the late 1940s. Much of the increased incidence was associated with drug abuse—the exchange of sex for drugs. Congenital syphilis was again an issue of public health concern for infant morbidity and mortality. Public health nursing protocols included standards of care for infected maternity patients and follow up for their newborn infants. Public health nurses increased their assessment for signs and symptoms of disease and for risk status of patients in their care, assisted disease intervention specialists with follow up of patients with positive laboratory results, and assisted with accessing medical treatment.

The incidence of another communicable disease, hepatitis B, was also increasing. With the advent of the hepatitis B vaccination, public health nurses implemented new protocols to screen maternity patients for hepatitis B and to provide follow up and immunization administration to the infants of infected mothers. Standing orders were written to effectively carry out the immunization and follow up of these infants. This was a major new public health initiative. See **Box 3-6** for a summary of activities during the 1980s and 1990s.

Federal monies increased for public health to address preventive intervention strategies for persons infected with HIV during the 1990s. States initiated programs to make select drugs available to patients. These programs required private physicians to submit medication orders for the patient. Public health nurses assisted patients with completing application forms, consulting private physicians regarding program guidelines, and adding medication.

Immunization administration had been a priority health effort for public health nurses since the early part of the century. A national emphasis reemerged in the early 1990s to meet a national objective to complete the immunization of 90% of all children by 2 years of age. The Centers for Disease Control and Prevention (CDC) identified barriers to children receiving their basic immunization series. The national discussion provided public

health nurses with current knowledge on their assessment of simultaneous administration of several vaccines when indicated and on contraindications for immunization administration (HHS, 1992).

## Science and Health Care, 1945–1960: Decades of Change

Dramatic technological and scientific changes characterized the decades following World War II, including the discovery of sulfa drugs, new cardiac drugs, surgeries, and treatment for ventricular fibrillation. The Hill-Burton Act, passed in 1946, provided funds to increase the construction of new hospitals. A significant change in the healthcare system was the expansion of private health insurance coverage and the dramatic increase in the birth rate, coined the “baby boom” generation. Clinical research, both in medicine and in nursing, became an expectation of health providers, and more nurses sought advanced degrees. The *Journal of Nursing Research* was first published, heralding the arrival of nursing scholarship in the United States.

Owing to increased numbers of hospital beds, additional financial resources for health care, and the post-World War II economic resurgence, an acute shortage of nurses occurred, and the existing staff faced increasingly stressful working conditions. Nurses began showing signs of the strain, engaging in debates about strikes and collective bargaining demands.

The composition of the nursing profession also changed. The ANA accepted African American nurses for membership, consequently ending racial discrimination in the dominant nursing organizations. The National Association of Colored Graduate Nurses was disbanded in 1951. Males entered nursing schools in record number, often as a result of previous military experience as medics. Prior to the 1950s and 1960s, male nurses had suffered minority status and were discouraged from nursing as a



career. Seemingly forgotten by modern society, including Florence Nightingale and early U.S. nursing leaders, males made up more than one-half of the nursing care during medieval times. The Knights Hospitalers, Teutonic Knights, Franciscans, and many other male nursing orders had provided excellent nursing care for their societies. In fact, St. Vincent de Paul had first conceived of the idea of social service. Pastor Theodor Fliedner, teacher and mentor of Florence Nightingale at Kaiserwerth in Germany; Ben Franklin; and Walt Whitman (during the Civil War) all either served as nurses or were strong advocates for male nurses (Kalisch & Kalisch, 1986).

### Years of Revolution, Protest, and the New Order, 1961–2000

During the social upheaval of the 1960s, nursing was influenced by many changes in society, such as the women's movement, the organized protest against the Vietnam War, the civil rights movement, President Lyndon Johnson's "Great Society" social reforms, and increased consumer involvement in health care. Specialization in nursing, such as cardiac intensive care unit (ICU), nurse anesthetist training, and the clinical specialist role for nursing emerged as a trend that affected both education and practice in the healthcare system. Medicare and Medicaid, enacted in 1965 under Title XVIII of the Social Security Act, provided access to health care for the elderly, the poor, and the disabled. The ANA took a courageous and controversial stand in that same year (1965) by approving its first position paper on nursing education, advocating for all nursing education for professional practice to take place in colleges and universities. Nurses returning from Vietnam faced emotional challenges through the recognition of post-traumatic stress disorder (PTSD), which affected some nurses' postwar lives.

With the increased specialization in medicine, the demand for primary care healthcare providers exceeded the supply. As a response to this need for general practitioners, Dr. Henry Silver (MD) and Dr. Loretta Ford (RN) collaborated to develop the first NP program in the United States at the University of Colorado (Silver, Ford, & Steady, 1967). NPs were initially prepared in pediatrics with advanced role preparation in common childhood illness management and well-child care. Silver and colleagues (1967) found that NPs could manage as much as 75% of the pediatric patients in community clinics, leading to the widespread use of NPs and growth of educational programs for NPs. The first state in 1971 to recognize diagnosis and treatment as part of the legal scope of practice for NPs was Idaho. Alaska and North Carolina were

among the first states to expand the NP role to include prescriptive authority. By the new century, NP programs were offered at the MSN level in family nursing, gerontology, adult, neonatal, mental health, and maternal–child care; they have since expanded to include the acute care practitioner as well. Certification of NPs now occurs at the national level through the ANA and many specialty organizations, and NPs are licensed throughout the United States by state boards of nursing (Hagedorn & Quinn, 2004). The doctorate of nursing practice (DNP) has emerged in the past decade as the preferred educational preparation for all advanced practice nurses.

### Managed Care and Healthcare Reform: First Decades of the 21st Century

Escalating healthcare costs resulting from the explosion of advanced technology and the increased lifespan of Americans led to the demand for healthcare reform in the late 1980s. The nursing profession heralded the way in healthcare reform when an unprecedented collaboration of more than 75 nursing associations, led by the ANA and NLN, published *Nursing's Agenda for Health Care Reform*. This document addressed the challenge of managed care in the context of cost containment and quality assurance of healthcare service for the nursing profession (ANA, 1991). **Managed care** is a market approach based on managed competition as a major strategy to contain healthcare costs; it remains a major system of care today, with expanded considerations as the ACA continues to influence the quality and costs of health care.

The IOM's (2008a) report *Assuring the Health of the Public in the 21st Century* builds upon its 1988 report and has major implications for public health policy development. The report contains several specific recommendations for strengthening the relationship between the vital sectors charged with protecting the public's health. The report proposes an ecological model upon which to base health professional education (including nursing education), clinical activities, and research with a population focus. Multiple determinants of health form the basis for an ecological model, which operates on the assumption that health is affected on several levels by these factors. Given that nurses make up the largest single workforce within the health system, the report's recommendations and the potential use of an ecological model as part of a population-focused practice have significant potential for creating new paths in nursing practice, education, and research.

A companion study by the IOM (2008b), *Who Will Keep the Public Healthy?*, builds on the ecological model

and considers factors likely to affect public health in the 21st century, such as globalization, technological and scientific advances, and demographic shifts in the U.S. population. It defines a public health professional as a person educated in public health or a related discipline who is employed to improve health through a population focus. Eight new content areas for public health professionals to master are identified in this study: informatics, genomics, communication, cultural competence, community-based participatory research, policy and law, global health, and ethics.

Even as these studies were being conducted, public health history was being changed. Seasoned public health professionals, experiencing the erosion of the basic public health infrastructure created by state and local budget cuts, had predicted that the United States would be challenged significantly should any of the dilemmas of the past return. None of those predictions, however, accurately portrayed the impact that the events of September 11, 2001, and the subsequent anthrax threats would have on public health. Almost overnight, public health agencies and their partners became immersed in emergency preparedness activities that have now become routine. Public health professionals were challenged to place a high priority on such activities as syndromic surveillance, mass-casualty planning, handling of biological and chemical agents that would also be considered evidentiary material, and other similar work. New partners such as postal workers, law enforcement, and communication experts emerged. Public health nurses were also called upon to administer smallpox vaccine, something that had not been done in almost 2 decades. The beginning of the 21st century dawned with improved health status and a new public health threat: terrorism. Since September 11, 2001, terrorism has been a constant threat to the United States and to the global community.

### ART CONNECTION

**R**esearch the web for early artwork where a nurse is featured from the 19th and 20th centuries. Describe how different these portrayals are from today's nurse.

The U.S. healthcare system continued to focus on federal coverage and spiraling costs during the first decade of the 21st century. The public and private sectors demonstrated increased dissatisfaction with healthcare access, quality, accessibility, and affordability. Healthcare organizations emerged in a managed care environment, involving public and private sectors of the healthcare industry. The economic and quality outcome benefits of caring for patients and managing their care over a continuum of

possible settings and needs were seen as positive for many. Continuing into the second decade of the new century, patients are followed more closely within the system, during both illness and wellness. Hospital stays continue to be shorter, and more healthcare services are being provided in outpatient facilities and through community-based settings such as home health, occupational health, and school health. War, bioterrorism, an aging population, and emerging epidemics are just some of the challenges for today's nurses. Consensus regarding basic education and the entry level of registered nurses has not occurred. Relating to the global community as well as our own diverse population demands that nurses remain committed to cultural sensitivity in care delivery.

Because of professional nurses' engagement in healthcare reform—beginning with *Nursing's Agenda for Health Care Reform* (ANA, 1991) and in the years following—the profession was poised to take a leadership role in the passage of the **Patient Protection and Affordable Care Act (ACA) of 2010**. The purpose of the ACA is to provide affordable, quality health care to all Americans. The ACA was signed into law March 23, 2010 and upheld by the U.S. Supreme Court, which ruled it constitutional on June 28, 2012. The bill includes unprecedented preventive care and protections, including insurance companies no longer being able to deny individuals for preexisting conditions or to drop them from coverage when they get sick.

The history of health care and nursing provides us with ample examples of the wisdom of our forebears in the advocacy of nursing in these challenging settings and the unknown future. Nurses today, by considering the lessons of the past, become part of a profession that is well prepared to provide the full range of quality, cost-effective services needed in the promotion of health throughout the new century. See **Box 3-7**.

### AFFORDABLE CARE ACT (ACA)

**N**ursing has been at the forefront of healthcare reform for many decades. The profession of nursing was the first of the health professions to support the creation of the Medicare program in 1958, in spite of critical opposition from the medical and hospital industries.

### LEVELS OF PREVENTION

**Primary:** Identify the primary healthcare interventions used by Florence Nightingale.

**Secondary:** What secondary interventions did Lillian Wald use?

**Tertiary:** How do tertiary interventions today differ from those in the past?

**BOX 3-7 Public Health Milestones 2000–2013**

<p>2001 9/11 terrorist attacks (New York City and Washington, DC) and bioterrorist attacks lead to new initiatives in state and federal public health policies, organizational responses, and initiatives</p> <p>2003 Severe acute respiratory syndrome (SARS) coronavirus identified</p> <p>2004 First state laws restricting access to over-the-counter medications used in methamphetamine production in Georgia</p> <p>2005 Hurricane Katrina hits New Orleans and Mississippi Gulf Coast resulting in unprecedented public health disaster and response at state and federal levels</p> <p>2006 CDC recommends 15th and 16th routine immunizations for children and adolescents (rotavirus and human papillomavirus, respectively)</p> <p>2007 CDC celebrates 60th anniversary.</p> <p>2008 CDC issues federal order of isolation, the last such order being issued in 1963</p> <p>2008 Large, multi-state foodborne illness outbreaks are detected and investigated, revealing gaps in food safety and the need to improve prevention efforts</p> <p>2009 CDC identifies the novel H1N1 influenza virus</p> <p>H1N1 flu pandemic dominates CDC activities</p> <p>2010 The Patient Protection and Affordable Care Act of 2010 (ACA) was signed into law, putting in place comprehensive U.S. health reform as the most significant federal mandate since the New Deal in the 1930s</p>	<p>7.0 magnitude earthquake in Haiti; CDC response efforts help prevent 7,000 deaths from cholera</p> <p>2011 Implementation of ACA: providing free preventive care for Medicare recipients; Community First Choice Option offers home- and community-based services to disabled individuals through Medicaid “Treatment as Prevention” as a means to reduce HIV transmission, after a research study showed that individuals who had started antiretroviral therapy immediately after diagnosis lowered the risk of HIV transmission to their uninfected sexual partners by as much as 96%</p> <p>Community resource programs enhanced to implement “test and treat” strategies for individuals and couples</p> <p>Increased treatment for HIV-positive mothers to prevent mother-to-child transmission</p> <p>2012 Implementation of ACA: electronic health records, encouraging integrated health systems by providing incentives for healthcare providers to form Accountable Care Organizations (ACOs)</p> <p>U.S. Supreme Court decision upholds ACA against legal Constitutional challenges, with the exception of mandatory State expansion of Medicaid</p> <p>Greater investment in health information technology: privacy, accessibility and security of patient data, and social media educational efforts</p> <p>2013-14 Implementation of ACA: Improved and expanded preventive health coverage for Medicaid recipients by providing new funding to state Medicaid programs and providers that chose to cover preventive services for patients at little or no cost</p>
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**Critical Thinking Activities**

1. Take a walk through your neighborhood and college campus. Identify public health measures that exist that can be traced to the Greek and Roman eras.
2. How do you think Lillian Wald would react to present-day public health departments?
3. How does the current interest in alternative and complementary health care relate to the Greeks’ ideas about health?
4. How would you explain healthcare reforms of the 20th and 21st centuries in the United States to those from other comparable societies and countries?

**References**

Abel, E. K. (1997, November). Take the cure to the poor: Patients’ responses to New York City’s tuberculosis program, 1894–1918. *American Journal of Public Health, 87*, 11.

Achterberg, J. (1990). *Woman as healer: A panoramic survey of the healing activities of women from prehistoric times to the present*. Boston, MA: Shambhala.

- Amendt, J. A., & White, R. P. (1965, July). Continued care services for mental patients. *Nursing Outlook*, pp. 57–60.
- American Nurses Association. (1991). *Nursing's agenda for health care reform*. Washington, DC: Author.
- American Public Health Association (APHA). (2006, November). *Public health milestones*. Unpublished paper. Washington, DC: Author.
- Andrews, G. (2003). Nightingale's geography. *Nursing Inquiry*, 10(4), 270–274.
- Association of State and Territorial Directors of Nursing (ASTDN). (1993). *Historical summary of the Association of State and Territorial Directors of Nursing (1935–1993)*. Unpublished manuscript.
- Association of State and Territorial Directors of Nursing (ASTDN). *Selected reports from annual meeting and correspondence, 1935–1993*.
- Attewell, A. (1996). Florence Nightingale's health-at-home visitors. *Health Visitor*, 69(10), 406.
- Baker, K. (2006, April/May). The future of New Orleans: Can the disasters that befell other cities help save this one? *American Heritage*.
- Barker, E. R. (1989). Care givers as casualties. *Western Journal of Nursing Research*, 11(5), 628–631.
- Barstow, A. L. (1994). *Witchcraze: A new history of the European witch hunt*. New York, NY: HarperCollins..
- Boorstin, D. J. (1985). *The discoverers: A history of man's search to know his world and himself*. New York, NY: Vintage.
- Bostridge, M. (2008). *Florence Nightingale: The making of an icon*. New York, NY: Farrar, Straus and Giroux.
- Brainard, A. M. (1922). *The evolution of public health nursing*. Philadelphia, PA: Saunders.
- Briggs, R. (1996). *Witches and neighbors: The social and cultural context of European witchcraft*. New York, NY: Penguin Books.
- Brockett, L. P., & Vaughan, M. C. (1867). *Woman's work in the civil war: A record of heroism, patriotism and patience*. Philadelphia, PA: Zeigler, McCurdy.
- Brooke, E. (1997). *Medicine women: A pictorial history of women healers*. Wheaton, IL: Quest Books.
- Brown, E. L. (1936). *Nursing as a profession*. New York, NY: Russell Sage Foundation.
- Brown, E. L. (1948). *Nursing for the future*. New York, NY: Russell Sage Foundation.
- Brown, P. (1988). *Florence Nightingale*. Herts, UK: Exley Publications.
- Buhler-Wilkerson, K. (1985). Public health nursing: In sickness or in health? *American Journal of Public Health*, 75, 1155–1156.
- Buhler-Wilkerson, K. (1993). Bringing care to the people: Lillian Wald's legacy of public health nursing. *American Journal of Public Health*, 83(12), 1778–1786.
- Bullough, V. L., & Bullough, B. (1978). *The care of the sick: The emergence of modern nursing*. New York, NY: Prodist.
- Calabria, M. D. (1996). *Florence Nightingale in Egypt and Greece: Her diary and "visions."* Albany, NY: State University of New York Press.
- Carnegie, M. E. (1991). *The path we tread: Blacks in nursing 1854–1990* (2nd ed.). New York, NY: National League for Nursing Press.
- Cartwright, F. F. (1972). *Disease and history*. New York, NY: Dorset Press.
- Cohen, M. N. (1989). *Health and the rise of civilization*. New Haven, CT: Yale University Press.
- Cook, E. (1913). *The life of Florence Nightingale* (Vols. 1 and 2). London, UK: Macmillan.
- Cottrell, H. (1948). *Mental health principles in the state and local health programs: A Commonwealth Fund demonstration* (Record Group 51, Vol. 36). Mississippi Department of Archives, Division of Public Health Nursing, Historical Files.
- Crawford, P. (1992). "The other lady with the lamp": Nursing legacy of Mary Seacole. *Nursing Times*, 88(11), 56–58.
- D'Antonio, P. (2002). Nurses in war. *Lancet*, 360(9350), 7–12.
- Diamond, J. (1997). *Guns, germs, and steel: The fates of human societies*. New York, NY: W. W. Norton.
- Dickens, C. (1844). *Martin Chuzzlewit*. New York, NY: Macmillan.
- Dietz, D. D., & Lehozky, A. R. (1963). *History and modern nursing*. Philadelphia, PA: F. A. Davis.
- Dock, L. N., & Stewart, I. M. (1931). *A short history of nursing* (3rd ed.). New York, NY: G. P. Putnam.
- Donahue, M. P. (1985). *Nursing: The finest art*. St. Louis, MO: Mosby.
- Dossey, B. M. (2000). *Florence Nightingale: Mystic, visionary, healer*. Springhouse, PA: Corporation.
- Erickson, G. P. (1996, June). To pauperize or empower: Public health nursing at the turn of the 20th and 21st century. *Public Health Nursing*, 13(3), 163–169.
- Erickson, P. (1940). *The role of the public health nurse in the syphilis research project in Washington County*. Presented at the 1940 annual meeting of the Mississippi Nurses Association, Jackson, MS.
- Forbes, M. D. (1946). *Report of a review of public health nursing in the Mississippi Board of Health* (Record Group 51, Vol. 36). Mississippi Department of Archives, Division of Public Health Nursing, Historical Files.
- Fromkin, D. (1998). *The way of the world: From the dawn of civilizations to the eve of the twenty-first century*. New York, NY: Random House.
- Gebbie, K. M. (1996, November 18). *Preparing currently employed public health nurses for change in the health care system: Meeting report and suggested action steps*. New York, NY: Columbia University School of Nursing Center for Health Policy and Health Sciences Research. (Report based on meeting in Atlanta, GA, July 11, 1996.)
- Goldmark, J. C. (1923). *Nursing and nursing education in the United States*. New York, NY: Macmillan.
- Hagedorn, S., & Quinn, A. A. (2004). Theory-based nurse practitioner practice: Caring in action. *Topics in Advanced Practice Nursing eJournal*, 4(4). Retrieved from [http://www.medscape.com/viewarticle/496718\\_2](http://www.medscape.com/viewarticle/496718_2)
- Hamilton, D. (1988). Clinical excellence, but too high a cost: The Metropolitan Life Insurance Company Visiting Nurse Service (1909–1953). *Public Health Nursing*, 5, 235–240.
- Hanlon, J. J., & Pickett, G. E. (1974a). Community nursing services. In J. J. Hanlon (Ed.), *Public health administration and practice* (pp. 533–547). St. Louis, MO: Mosby.



- Hanlon, J. J., & Pickett, G. E. (1974b). Historical perspectives. In J. J. Hanlon (Ed.), *Public health administration and practice* (pp. 22–44). St. Louis, MO: Mosby.
- Hanlon, J. J., & Pickett, G. E. (1984). *Public health administration and practice* (8th ed.). St. Louis, MO: Mosby.
- Heinrich, J. (1983). Historical perspectives on public health nursing. *Nursing Outlook*, 32(6), 317–320.
- Hine, D. C. (1989). *Black women in white: Racial conflict and cooperation in the nursing profession 1890–1950*. Bloomington, IN: Indiana University Press.
- Howse, C. (2007). “The ultimate destination of all nursing”: The development of district nursing in England, 1880–1925. *Nursing History Review*, 15, 65–94.
- Institute of Medicine (IOM). (1988). *The future of public health*. Washington, DC: National Academies Press.
- Institute of Medicine (IOM). (2008a). *Assuring the health of the public in the 21st century*. Retrieved from <http://www.iom.edu/Activities/PublicHealth/PubHealth21stCen.aspx>
- Institute of Medicine (IOM). (2008b). *Who will keep the public healthy: Educating public health professionals for the 21st century*. Retrieved from <http://www.iom.edu/CMS/3793/4723/4307.aspx>
- Johnson, S. (2006). *The ghost map: The story of London's most terrifying epidemic and how it changed science, cities and the modern world*. New York, NY: Penguin Books.
- Kalisch, P. A., & Kalisch, B. J. (1986). *The advance of American nursing* (2nd ed.). Boston, MA: Little, Brown.
- Le Vasseur, J. (1998). Plato, Nightingale, and contemporary nursing. *Image: Journal of Nursing Scholarship*, 30(3), 281–285.
- Longfellow, H. W. (1857, November). Santa Filomena. *Atlantic Monthly*, 1, 22–23.
- MacEachern, M. T. (1932). Which shall we choose: Graduate or student service? *Modern Hospital*, 38, 97–98, 102–104.
- Minkowski, W. I. (1992). Women healers of the Middle Ages: Selected aspects of their history. *American Journal of Public Health*, 82(2), 288–295.
- Montag, M. L. (1959). *Community college education for nursing: An experiment in technical education for nursing*. New York, NY: McGraw-Hill.
- Monteiro, L. A. (1985). Florence Nightingale on public health nursing. *American Journal of Public Health*, 75(2), 181–185.
- Morton, M., Roberts, E., & Bender, K. (1993). *Celebrating public health nursing: Caring for Mississippi's communities with courage and compassion, 1920–1993*. Jackson, MI: Mississippi State Department of Health.
- Mosley, M. O. P. (1996). Satisfied to carry the bag: Three black community health nurses' contribution to health care reform, 1900–1937. *Nursing History Review*, 4, 65–82.
- Nightingale, F. (1893). Sick-nursing and health-nursing. In *Women's mission* (pp. 184–205). (Arranged and ed. by Baroness Burdett-Coutts.) London, UK: Sampson, Law, Marston.
- Nightingale, F. (1915). Florence Nightingale to her nurses: A selection from Miss Nightingale's addresses to probationers and nurses of the Nightingale school at St. Thomas's Hospital. London, UK: Macmillan.
- Nightingale, F. (1979). Cassandra. In M. Stark (Ed.), *Florence Nightingale's Cassandra* (original work published in 1928). Old Westbury, NY: Feminist Press.
- Nutting, M. A., & Dock, L. L. (1907). *A history of nursing* (Vol 1). New York, NY: G. P. Putnam.
- The 100 people who made the millennium. (1997). *Life Magazine*, 20(10a).
- Palmer, I. S. (1977, March/April). Florence Nightingale: Reformer, reactionary, researcher. *Nursing Research*, 13–18.
- Palmer, I. S. (1982). *Through a glass darkly: From Nightingale to now*. Washington, DC: American Association of Colleges of Nursing.
- Payne, D. (1999). Face to face: Florence Nightingale and Mary Seacole battle it out face to face. *Nursing Times*, 95(19), 26–27.
- Pyle, E. (1944). *Here is your war: The story of G. I. Joe*. Cleveland, OH: World Publishing.
- Rathbone, W. (1890). *A history of nursing in the homes of the poor*. Introduction by Florence Nightingale. London, UK: Macmillan.
- Richardson, B. W. (1887). *The health of nations: A review of the works of Edwin Chadwick* (Vol. 2). London, UK: Longmans, Green.
- Roberts, E. (1985a). *Highlights: Maternal and child health and crippled children's service, 1935–1985*. Jackson, MS: Mississippi Department of Health.
- Roberts, E. (1985b, March). *The role of the southern nurse in public health*. Symposium on Southern Science and Medicine at the Education and Research Center, Jackson, MS.
- Roberts, M. (1954). *American nursing: History and interpretation*. New York, NY: Macmillan.
- Robinson, V. (1946). *White caps: The story of nursing*. Philadelphia, PA: Lippincott.
- Rosen, G. (1958). *A history of public health*. New York, NY: M. D. Publications.
- Sabin, L. (1998). *Struggles and triumphs: The story of Mississippi nurses 1800–1950*. Jackson: Mississippi Hospital Association Health, Research and Educational Foundation.
- Sanger, M. (1928). *Motherhood in bondage*. New York, NY: Brentano's.
- Seymer, L. (1954). *Selected writings of Florence Nightingale*. New York, NY: Macmillan.
- Shryock, R. H. (1959). *The history of nursing: An interpretation of the social and medical factors involved*. Philadelphia, PA: Saunders.
- Silver, H. K., Ford, L. C., and Steady, S. G. (1967). A program to increase health care for children: The pediatric nurse practitioner program. *Pediatrics*, 39(3).
- Smith, E. (1934). *Mississippi special public health nursing project made possible by federal funds*. Paper presented at the 1934 annual Mississippi Nurses Association meeting, Jackson, MS.
- Snow, (1855). *On the mode of communication of cholera* (2nd ed.). London, England: Churchill Publishers.
- Stanmore, A. H. G. (1906). *Sidney Herbert of Lea: A memoir*. New York, NY: E. P. Dutton.
- The State Board Test Pool Examination. (1952). *American Journal of Nursing*, 52, 613.
- Stewart, I. M. (1921). Developments in nursing education since 1918. *U. S. Bureau of Education Bulletin*, 20(6), 3–8.
- Taylor, H. O. (1922). *Greek biology and medicine*. Boston, MA: Marshall Jones.
- Tiffany, F. (1890). *The life of Dorothea Lynde Dix*. Boston, MA: Houghton Mifflin.

- Tyrell, H. (1856). *Pictorial history of the war with Russia 1854–1856*. London, UK: W. and R. Chambers.
- Vicinus, M., & Nergaard, B. (1990). *Ever yours, Florence Nightingale: Selected letters*. Boston, MA: Harvard University Press.
- U.S. Department of Health and Human Services. (1988, December). *Final report of the Secretary's Commission on Nursing*. Washington, DC: Author.
- U.S. Department of Health and Human Services, Public Health Services, Centers for Disease Control and Prevention. (1992, May). *Standards for pediatric immunization practice*. Atlanta, GA: Author.
- Wald, L. D. (1915). *The house on Henry Street*. New York, NY: Henry Holt.
- Weiner, D. B. (1993). *The citizen patient in revolutionary and imperial Paris*. Baltimore, MD: Johns Hopkins University Press.
- Wertz, R. W., & Wertz, D. C. (1977). *Lying-In: A history of childbirth in America*. New Haven, CT: Yale University Press.
- Williams, C. B. (1961, May). Stories from Scutari. *American Journal of Nursing*, 61, 88.
- Winslow, C. E. A. (1946). Florence Nightingale and public health nursing. *Public Health Nursing*, 38, 330–332.
- Woodham-Smith, C. (1951). *Florence Nightingale*. New York, NY: McGraw-Hill.
- Woodham-Smith, C. (1983). *Florence Nightingale*. New York, NY: Atheneum.
- Young, D. A. (1995). Florence Nightingale's fever. *British Medical Journal*, 311, 1697–1700.