

# Content Outline

## Unit B History and Trends of Health Care

HT02.01 Discuss medical treatments and beliefs from ancient civilizations through the Renaissance.

A. 4000 BC – 3000 BC Primitive Times

1. Illness and diseases were a punishment from the Gods
2. Tribal witch doctors treated illness with ceremonies
3. Herbs and plants used as medicines (morphine and digitalis)
4. Trepanation or trephining

B. 3000 BC – 300 BC Ancient Egyptians

1. Physicians were priests
2. Bloodletting or leeches used as medical treatment

C. 1700 BC – AD 220 Ancient Chinese

1. Used therapies such as acupuncture

D. 1200 BC – 200 BC Ancient Greeks

1. First to observe the human body and the effects of disease – led to modern medical sciences.
2. Believed illness is a result of natural causes
3. Used therapies such as massage, art therapy, and herbal treatment

E. 753 BC – AD 410 Ancient Romans

1. Established first hospital (caring for soldiers in their homes)
2. First public health and sanitation systems by building sewers and aqueducts

F. AD 400 – AD 800 Dark Ages

1. Began after the fall of the Roman Empire
2. Emphasis on saving the soul and study of medicine was prohibited
3. Monks and priests treated patients with prayer

G. AD 800 – AD 1400 Middle Ages

1. Renewed interest in medical practices of Greek and Romans
2. Bubonic Plague killed 75% of population in Europe and Asia

H. AD 1350 – AD 1650 Renaissance

1. Dissection of body led to increased understanding of anatomy and physiology
2. Invention of printing press allowed medical knowledge to be shared

HT02.02 Describe medical advances made in the 16<sup>th</sup> - 20<sup>th</sup> centuries.

A. 16<sup>th</sup>, 17<sup>th</sup>, and 18<sup>th</sup> Centuries

1. Cause of disease still not known – many people died from infections
2. Invention of the microscope allowed physicians to see disease-causing organisms.
3. Apothecaries led to development of pharmacies
4. First vaccination developed – smallpox

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B.4

B. 19<sup>th</sup> Century

1. Formal training for nurses began
2. Infection control developed once microorganisms were

associated with disease

3. Viruses discovered in 1892

4. Women became active participants in health care

C. 20<sup>th</sup> Century

1. Increased knowledge about the role of blood in the body

a. ABO blood groups discovered

b. Found out how white blood cells protect against disease

2. New medications were developed

a. Insulin discovered and used to treat diabetes

b. Antibiotics developed to fight infections

c. Vaccines were developed

3. New machines developed

a. Kidney Dialysis Machine

b. Heart Lung Machine

4. Surgical and diagnostic techniques developed to cure once fatal conditions

a. Organ Transplants

b. Test tube babies

c. Implanted first artificial heart

5. Health Care Plans developed to help pay the cost of care

a. Medicare and Medicaid marked the entry of the federal government into the health care arena

b. HMOs provided an alternative to private insurance

c. Hospice organized

HT02.03 Research men/women who made historical contributions to health care

A. Hippocrates (c. 460 – 377 BC)

1. Greek physician known as the “Father of Medicine

2. Authored code of conduct for doctors known as the “Hippocratic Oath” that is the basis of medical practice today

3. Believed illness was not caused by evil spirits and stressed importance of good diet, fresh air, cleanliness, and exercise

B. Anton van Leeuwenhoek (1632-1723)

1. Invented the microscope lens that allowed visualization of organisms

2. Scraped his teeth and observed the bacteria that causes tooth decay

C. Benjamin Franklin (1706-1790)

1. Invented bifocals

2. Found that colds could be passed from person to person

D. Edward Jenner (1749-1823) Developed a vaccination for smallpox in 1796

E Rene Laennec (1781-1826)

1. Invented the stethoscope in 1819

2. First stethoscope was made of wood

F. Elizabeth Blackwell (1821-1910) First female physician in the United States in 1849

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B.5

G. Florence Nightingale (1820-1910)

1. Known as the “Founder of Modern Nursing”

2. Established efficient and sanitary nursing units during

the Crimean War in 1854

3. Invented the call bell system and use of dumbwaiters to deliver meals

4. Began the professional education of nurses

H. Louis Pasteur (1822-1895)

1. Known as the "Father of Microbiology"

2. His germ theory proved that microorganisms cause disease

3. Proved that heat can be used to destroy germs through a process called pasteurization

4. Created a vaccine for rabies in 1885

5. Founded the basic rules for sterilization

I. Joseph Lister (1827-1912)

1. Used carbolic acid on wounds to kill germs

2. First doctor to use an antiseptic during surgery

J. Clara Barton (1821-1912)

1. Volunteer nurse for wounded soldiers during the Civil War

2. After Civil War, established a bureau of records to search for missing men

3. Campaigned for the USA to sign the Treaty of Geneva, which provided relief for sick and wounded soldiers

4. Formed American Red Cross in 1881 and served as its first president

K. Robert Koch (1843-1910)

1. Developed the culture plate method to identify pathogens

2. Isolated the bacterium that causes tuberculosis

L. Wilhelm Roentgen (1845-1923)

1. Discovered roentgenograms (X-rays) in 1895

2. Let doctors see inside the body

3. X-rayed wife's hand

M. Sigmund Freud (1836-1939)

1. Discovered the conscious and unconscious part of the mind

2. His studies were the basis for psychology and psychiatry

N. Sir Alexander Fleming (1881-1955) Discovered penicillin in 1928 which is considered one of the most important discoveries of the twentieth century

O. Jonas Salk (1914-1995) and Albert Sabin (1906 – 1993)

1. Discovered polio vaccine

2. Saved many people from this virus that paralyzed thousands of adults and children each year.

P. Francis Crick and James Watson

1. Described the structure of DNA and how it carries genetic information in 1953

2. Built a three-dimensional model of the molecules of DNA

3. Shared the Noble Prize in 1962

Q. Christian Barnard - Performed first successful heart transplant in 1968

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B.6

R. Ben Carson

1. Famous for his surgeries to separate Siamese twins

2. Currently Director of Pediatric Neurosurgery at John

Hopkins

3. He has refined hemispherectomy, a surgery on the brain to stop seizures

HT02.04 Explore current trends in health care.

A. Cost containment

1. Reasons for high health care costs

a. Technological advances

b. Aging population

c. Health-related lawsuits

2. Methods of cost containment

a. Diagnostic related groups (DRG)

b. Combination of services

c. Outpatient services

d. Mass or bulk purchasing

e. Early intervention and preventive services

B. Home health care

C. Geriatric care

1. Types of facilities

2. Omnibus Budget Reconciliation Act (OBRA)

D. Telemedicine

E. Wellness

1. Physical wellness

2. Emotional wellness

3. Social wellness

4. Mental and intellectual wellness

5. Spiritual Wellness

6. Holistic Health

F. Alternative and Complementary Methods of Health Care

1. Ayurvedic practitioners

2. Chinese medicine practitioners

3. Chiropractors

4. Homeopaths

5. Hypnotists

6. Naturopaths

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