# **Chapter 1**

History & Trends of Health Care

# Why is it important to understand the history of health care?

# Ancient Times (4000-3000BC)

- In primitive times, common belief was that disease & illness were caused by evil spirits and demons.
- Treatment was aimed at eliminating the evil spirits
- Many ancient treatments were actually harmful
- As civilizations developed, changes occurred as people began to study the human body and make observations about how the body functions

# **Ancient Egyptians (3000-300BC)**

- Ancient Egyptians were the first people to record health records
- Knowledge limited to the few educated because many could not read or write
- Most records were recorded on stone & created by priests, who also acted as

physicians

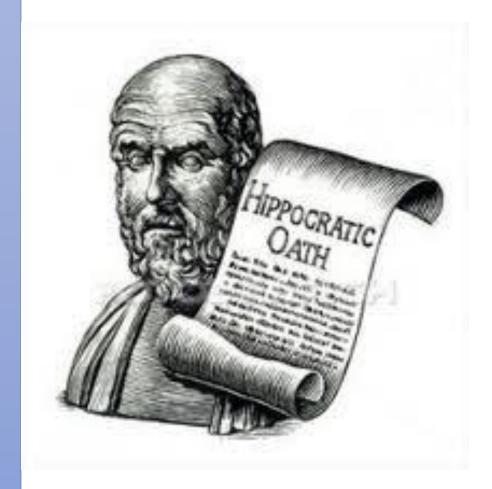
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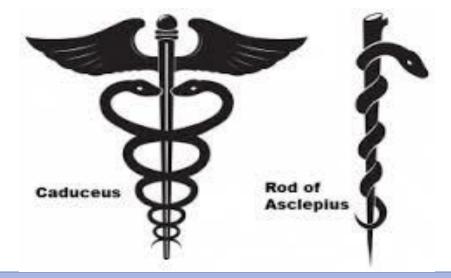
# Ancient Chinese (1700BC- AD220)

- Ancient Chinese had a strong belief in the need to cure the spirit and nourish the body
  - this treatment remains important today
  - Chinese herbal medicine, acupuncture, and massage
     are still commonly used

# **Ancient Times**

- Hippocrates was known as the "Father of Medicine"
- Ancient Greek physician
- Helped establish that disease is caused by natural causes, not supernatural spirits & demons
- Author of code of conduct for physicians, known as the
  - "Hippocratic Oath"
    - still used (adapted)





#### **Rod of Asclepius**

Greek symbol associated with medicine & healing

- founded in ancient Greece
- in Greek mythology, Asclepius was believed to be the son of Apollo & the god of healing
- Symbol consists of a staff entwined by a single serpent

#### **Caduceus Symbol**

Often mistaken as the medical symbol, but it is actually the symbol for commerce

## Ancient Greeks (1200-200BC)

- First to study the cause of disease
- Diseases were caused by lack of sanitation



#### **Ancient Times**

- Romans realized some diseases were connected to filth, contaminated water, & poor sanitation
  - began development of sanitary systems by building sewers to carry away waste & deliver clean water
  - drained swamps & marshes to reduce incidence of malaria
  - created laws to keep streets clean & eliminate garbage

#### **Ancient Times**

- The first hospitals were established in ancient Rome
- Although changes occurred, treatment was still limited
- First to provide medical care to soldiers



### Dark Ages 400–800 AD

- Study of medicine fell after the fall of the Roman Empire
- Individuals again lived in unsanitary conditions
- Epidemics of smallpox, dysentery, typhus, & plague were rampant

Epidemics - An outbreak of a contagious disease
that spreads rapidly and extensively by infection
and affects many individuals in an area or a
population at the same time.

<u>Plagues</u>: any widespread and usually highly contagious disease with a high fatality rate (many caused by rodents-human bitten by flea of rat)

Monks and priests stressed prayer to treat illness and disease

## Middles Ages 800-1400 AD

- Renewed interest in the medical practices of the Romans & Greeks
- Monks obtained & translated the writings of the Greek & Roman physicians, and recorded the knowledge in handwritten books
- Medical universities were created
- Arabs began requiring physicians to pass exams & obtain licenses
- In the 1300's, a major epidemic of bubonic plague killed almost 75 percent of the population of Europe & Asia
- Many infants died shortly after birth & many children didn't live into adulthood



#### Renaissance 1350–1650 AD

- "rebirth of the science of medicine"
- Major source of new info about the human body was a result of accepting & allowing human dissection
  - physicians could now view body organs & see the connection between different systems in the body
  - artists, such as Michelangelo & Leonardo da Vinci, were able to draw the body accurately
- Development of the printing press resulted in the publication of medical books

## 16<sup>th</sup>, 17<sup>th</sup>, and 18<sup>th</sup> Centuries

- William Harvey described circulation of blood
- Gabriel Fallopius described tympanic membrane & fallopian tubes
- Anton van Leeuwenhoek invented the microscope
  - allowed physicians to see smaller organisms
- Apothecaries made, prescribed, & sold medications
  - many meds made from plants & herbs
- Edward Jenner developed a vaccine to prevent smallpox
- Average life span increased to 40 to 50 years

# 19<sup>th</sup> Century

- Also known as the Industrial Revolution
- Major progress in medicine occurred because of the development of machines & ready access to books
- Rene' Laennec invented the stethoscope
- Formal training for nurses began
- Florence Nightingale established sanitary nursing care units for injured soldiers
- Major developments in infection control
- Women became active participants in medical care
  - Elizabeth Blackwell: first female physician in US
  - Clara Barton founded the American Red Cross
- Average life span increased to 40-65 years
- Treatment for disease more specific b/c causes identified

# 20th Century

- Showed the most rapid growth in health care
- New machines, such as X-rays-William Roentgen
- Meds, including insulin for diabetes, antibiotics to fight infections, & vaccines to prevent diseases were identified
- Francis Crick & James Watson described the structure of DNA & how it carries genetic information
- Health care plans started to help pay for medical costs
- First open-heart surgery
- Computers used in every aspect of health care
- Average life span increased to age 60–80 (some live to 100)