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
• Created embalming
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.

  **Plagues**: 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
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<tr>
<th><strong>Middles Ages</strong> 800-1400 AD</th>
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<td>• Renewed interest in the medical practices of the Romans &amp; Greeks</td>
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<td>• Monks obtained &amp; translated the writings of the Greek &amp; Roman physicians, and recorded the knowledge in handwritten books</td>
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<td>• Medical universities were created</td>
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<td>• Arabs began requiring physicians to pass exams &amp; obtain licenses</td>
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<td>• In the 1300’s, a major epidemic of bubonic plague killed almost 75 percent of the population of Europe &amp; Asia</td>
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<td>• Many infants died shortly after birth &amp; many children didn’t live into adulthood</td>
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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
16th, 17th, and 18th 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
19th 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)