History of Health Care Timeline

Objectives

Students will:

- Identify medical/health care milestones that have led to advances in health care.
- Predict where and how factors such as cost, managed care, technology, and aging population, access to care, alternative therapies, and lifestyle behavior may affect various health delivery system models.

4000 BC – 3000 BC Primitive Times

Illness and diseases were a punishment from the gods Healers: Tribal witch doctors treated illness with ceremonies Medicine: Herbs and plants (morphine and digitalis) Treatment: Trepanation or trephining (surgically removing a piece of bone from the skull) Average life span = 20 years



Primitive Times



Trephining



3000 BC – 300 BC Ancient Egyptians

Egyptians used a paper-like material called papyrus to document medical knowledge.

- Healers: Priests & Magicians
 - Medicine: Herbs, beer, & wine
 - **Treatment:** Accurate health records, wrote prescriptions on papyrus, developed technique of splinting fractures, closing wounds, embalming, & enemas
- Superstitious & called on gods of healing
 - Average life span = 20-30 years



Ancient Egyptians

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A DAY IN THE LIFE OF AN ANCIENT EGYPTIAN DOCTOR

Prescription

According to most sources, Rx is derived from the Latin word "recipe," meaning "take." Among several alternative theories, however, is the belief that the Rx symbol evolved from the Eye of Horus, an ancient Egyptian symbol associated with healing powers.



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1700 BC – AD 220 Ancient Chinese

Believed in the need to treat the whole body by curing the spirit and nourishing the body. One theory was the balance of <u>Yin and</u> Yang.

- Healers: Herbal Doctors
 - Medicine: Herbs
- Treatment: acupuncture, acupressure & cupping
- Began to search for <u>medical</u> reasons for illness
 - Average life span = 20-30 years



Ancient Chinese





1200 BC –200 BC Ancient Greeks

- First to <u>observe</u> the human body and the effects of disease – led to <u>modern</u> medical sciences.
- Healers: Medical Practitioners: no formal qualifications needed
- Medicine: Stressed diet and exercise as ways to prevent disease. Used herbs and roots but also included the use of amulets and charms
- Treatment: Used therapies such as massage, art therapy, and herbal treatment. Surgery was a last resort.
 - **Average life span** = 25-35 years



753 BC – AD 410 Ancient Romans

- First to organize medical care by providing care for injured soldiers
- First public health and <u>sanitation systems</u> by building <u>sewers</u> and <u>aqueducts</u>
- Healers: Medical Practitioners: no formal qualifications needed (Had a low social status. Many were freed Greek slaves)
 - Medicine: Stressed diet and exercise as ways to prevent disease. Used herbs and roots but also included the use of amulets and charms





753 BC – AD 410 Ancient Romans

 Treatment: Surgery as last resort but did perform removal of cataracts, draining of fluids, and trepanation.
Wounds were stitched following surgery using flax, linen thread or metal pins.
Dressings were of linen bandages or sponges

- Galen established belief that the body was regulated by four body humors; blood, phlegm, black bile, and yellow bile
- Average life span = 25-35 years





Ancient Romans



Instagram Assignment

- Create a user profile that is relevant to your time period
- Include the time/date
- Include a relative image to your time period
- Include followers' user profile names
- Include 3 discussion posts relevant to your time period



AD 400 – AD 800 Dark Ages

- Emphasis on saving the <u>soul</u> and study of medicine was prohibited
- Healers: Monks and priests provided custodial care for sick people
- Medicine: herbal mixtures and faith
- Treatment: Prayer and divine intervention were used to treat illness & disease
- Average life span = 20-30

years



AD 800 – AD 1400 Middle Ages

- Bubonic Plague killed a 1/3 of the population in Europe and Asia
- Major diseases included <u>smallpox</u>, <u>diphtheria</u>, <u>tuberculosis</u>, <u>typhoid</u>, the <u>plague</u>, and <u>malaria</u>
- Healers: Arabs began requiring physicians pass examinations and obtain licenses
- Medicine: herbal mixtures and faith
- Treatment: Renewed interest in medical practices of Greek and Romans
- Average life span = 20-35 years



Dark to Middle Ages



AD 1350 – AD 1650 Renaissance

Healers: Dissection of body led to increased understanding of anatomy and physiology

Medical Advancements

Invention of printing press

First anatomy book was published by Andreas Vesalius (1514-1564)

Average life span = 30-40 years



16th and 17th Centuries

Cause of disease still not known – many people died from infections Healers: Apothecaries (early

pharmacists) made, prescribed, and sold medications

Medical Advancements

Invention of the microscope allowed physicians to see disease-causing organisms.
Use of ligatures to stop bleeding
Average life span = 35-45 years



18th Century

Rene Laennec (1781-1826) invented the first stethoscope (was wooden)

- Gabriel Fahrenheit (1686-1736) created the first mercury thermometer in1724
- Anders Celsius (1701-1744) created the centigrade or "Celsius" scale thermometer in 1742
- John Hunter (1728-1793), established scientific surgical procedures and introduced tube feeding
- Average life span = 40-50 years





19th Century

- Rapid advancements due to discoveries of <u>microorganisms</u>, <u>anesthesia</u>, and <u>vaccinations</u>
- Infection control developed once microorganisms were associated with disease
- Formal training for <u>nurses</u> began
- Women became active participants in health care
- Average life span = 40-60 years

20th Century

- Increased knowledge about the role of <u>blood</u> in the body
- <u>ABO</u> blood groups discovered
- Found out how white blood cells protect against disease
- New medications were developed
 - Insulin discovered and used to treat diabetes
 - Antibiotics developed to fight infections-Penicillin
 - Vaccines were developed
- New machines developed
 - Kidney Dialysis Machine
 - Heart Lung Machine
 - Surgical and diagnostic equipment developed to cure once fatal conditions

20th Century (continued)

New techniques developed

- Organ Transplants and Implanted first artificial heart
- Test tube babies

Insurance

- Health Care Plans developed to help pay the cost of care
- Medicare and Medicaid marked the entry of the federal government into the health care arena
- Hospice organized
- Average life span = 80-90 years

Hospice



Think about patients who are ill and days from dying...

What needs do they have that will need to be met by the healthcare provider?

In groups: write down at least 3 answers on the white board

21st Century

- The <u>Netherlands</u> became the first country in the world to legalize <u>euthanasia</u> in 2002
- The <u>Human Genome Project to identify all</u> of the approximately <u>20,000 to 25,000</u> genes in the human
- Stem cells were used in the treatments of disease early in the 2000's and lead to increased research in the treatment of cancer and other diseases

21st Century

- Advanced Cell Technology announced it cloned a human <u>embryo</u> in <u>2001</u> but the embryo did not survive
- The standards for Privacy of Individually Identifiable Health Information, required under the Health Insurance Portability and Accountability Act (HIPAA) of 1996, went into effect in 2003
- Vaccinations for <u>cervical cancer and herpes</u> <u>zoster</u> (shingles) in 2006

Potential for 21st Century

- Cures for AIDS, cancer, and heart disease
- Genomic Medicine: Genetic manipulation to prevent or treat diseases.
- Regenerative Medicine: medical care that creates living tissue or organ functions lost due to age, disease, injury, or birth disorder.
- Average life span = 80-100 years