

Prevention of injury from predators

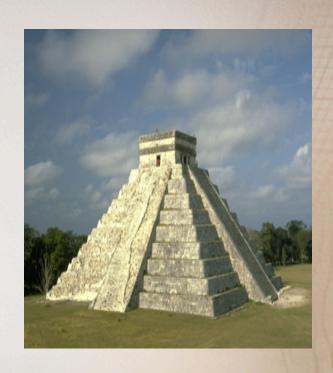
• Illness/disease caused by supernatural spirits

- Herbs and plants were used as medicine examples:
 - Digitalis from foxglove plants
 - Then, leaves were chewed to strengthen & slow heart
 - Now, administered by pills, IV, or injections

- Herbs and plants were used as medicine examples:
 - -Quinine from bark of cinchona tree
 - Controls fever and muscle spasms
 - Used to treat malaria

- Herbs and plants were used as medicine examples:
 - Belladonna and atropine from poisonous nightshade plant
 - relieves muscle spasms especially GI
 - -Morphine from opium poppy
 - relieves severe pain

- Earliest to keep accurate health records
- Superstitious
- Called upon gods
- Identified certain diseases
- Pharaohs kept many specialists



Priests were the doctors

-Temples were places of worship, medical schools, and hospitals

Only the priests could read the medical knowledge from the god
 Thoth

Magicians were also healers

Believed demons caused disease

Prescriptions were written on papyrus

- Embalming
 - Done by special priests (NOT the doctor priests)
 - Advanced the knowledge of anatomy
 - Strong antiseptics used to prevent decay
 - Gauze similar to today's surgical gauze

 Research on mummies has revealed the existence of diseases

- -Arthritis
- -Kidney stones
- -Arteriosclerosis

- Some medical practices still used today
 - -Enemas
 - -Circumcision (4000 BC) preceded marriage
 - Closing wounds
 - -Setting fractures

- Eye of Horus
 - -5000 years ago
 - Magic eye
 - amulet to guard against disease,
 suffering, and evil
 - History: Horus lost vision in attack by Seth; mother (Isis) called on Thoth for help; eye restored
 - Evolved into modern day R_x sign

Jewish Medicine

- Avoided medical practice
- Concentrated on health rules concerning food, cleanliness, and quarantine
- Moses: pre-Hippocratic medical practice
 - -banned quackery (God was the only physician)
 - -enforced Day of Rest

Greek Medicine

- First to study causes of diseases
- Research helped eliminate superstitions
- Sanitary practices were associated with the spread of disease

Greek Medicine

- Hippocrates
 - no dissection, only observations
 - took careful notes of signs/symptoms of diseases
 - disease was not caused by supernatural forces
- Father of Medicine
 - wrote standards of ethics which is the basis for today's medical ethics

Greek Medicine



- Aesculapius
 - -staff and serpent symbol of medicine
 - -temples built in his honor because the first true clinics and hospitals

Roman Medicine

- Learned from the Greeks and developed a sanitation system
 - Aqueducts and sewers
 - -Public baths
- Beginning of public health

Roman Medicine

- First to organize medical care
- Army medicine
- Room in doctors' house became first hospital
- Public hygiene
 - -flood control
 - -solid construction of homes

Dark Ages (400-800 A.D.) and Middle Ages (800-1400 A.D.)

 Medicine practiced only in convents and monasteries

custodial care

• life and death in God's hands

Dark Ages (400-800 A.D.) and Middle Ages (800-1400 A.D.)

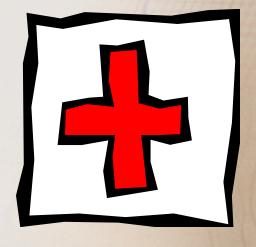
- Terrible epidemics
 - -Bubonic plague (Black Death)
 - Small pox
 - Diphtheria
 - Syphilis
 - Measles
 - Typhonid fever
 - Tuberculosis

Dark Ages (400 –800 A.D.) and Middle Ages (800-1400 A. D.)

- Crusaders spread disease
- Cities became common
- Special officers to deal with sanitary problems
- Realization that diseases are contagious
- Quarantine laws passed

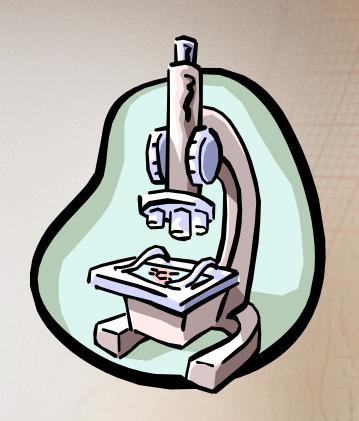
Renaissance Medicine (1350-1650 A.D.)

- Universities and medical schools for research
- Dissection
- Book publishing



16th & 17th Century

- Leonardo da Vinci
 - anatomy of the body
- Anton van
 Leeuwekhoek (1676)
 - inventedmicroscope
 - observedmicroorganisms



16th & 17th Century

- William Harvey
 - circulation of blood
- Gabriele Fallopian
 - discovered fallopian tube
- Bartholomew Eustachus
 - discovered the eustachian tube
- Some quackery

18th Century

- Edward Jenner 1796
 - -smallpox vaccination

- Joseph Priestly
 - -discovered oxygen

18th Century

- Benjamin Franklin
 - -invented bifocals
 - found that colds could be passed from person to person
- Laennec
 - -invented the stethoscope

- Inez Semmelweiss
 - identified the cause of puerperal fever which led to the importance of hand washing
- Louis Pasteur (1860 1895)
 - discovered that microorganisms cause disease (germ theory of communicable disease)

- Joseph Lister
 - first doctor to use antiseptic during surgery
- Ernest von Bergman
 - developed asepsis
- Robert Koch
 - Father of Microbiology
 - identified germ causing TB

- Wilhelm Roentgen
 - -discovered X-rays
- Paul Ehrlick



- discovered effect of medicine on disease causing microorganisms
- Anesthesia discovered
 - -nitrous oxide, ether, chloroform

- Alexander Fleming
 - discovered penicillin
- Jonas Salk
 - discovered that a killed polio virus would cause immunity to polio
- Alfred Sabin
 - discovered that a live virus provided more effective immunity

1900 to 1945

- Acute infectious diseases (diphtheria, TB, rheumatic fever)
- No antibiotics, DDT for mosquitoes, rest for TB, water sanitation to help stop spread of typhoid fever, diphtheria vaccination
- Hospitals were places to die
- Most doctors were general practitioners

1945 to 1975

- Immunization common
- antibiotic cures
- safer surgery
- Transplants
- increased lifespan
- chronic degenerative diseases

1945 to 1975

- new health hazards
 - -obesity
 - -neuroses
 - -lung cancer
 - -hypertension
- disintegrating families
- greatly increasing medical costs