

Chapter 1

History and Trends of Health Care



1:1 History of Health Care

- **Some treatment methods** used today are from ancient times
ie: **Morphine**
- **Herbs** utilized in the past for both food and medicine are found in medications **today**
- **Discoveries** throughout the ages have influenced and contributed to the improvement of **today's** health care



Ancient Times

Illness and disease were caused by evil spirits and demons or punishment by God

Ancient Contributions:

- **Egyptians**: first to use health records
- **Chinese**: belief in cure the spirit & nourish entire body.
- **Hippocrates**: Greek called “**Father of Medicine**” established the importance of nutrition and cleanliness in preventing illness and disease .

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- **Romans** implemented the use of **sewers** for waste and **aqueducts** (waterways) for clean water & first hospitals. Avg life span was 20-35 y/o.



Roman
Aqueduct



California
Aqueduct

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The Dark and Middle Ages



- **Study of medicine** stopped
- **Epidemics** of smallpox, dysentery, typhus & the bubonic plague were rampant.
- An outbreak of **bubonic plague** in the 1300s resulted in the death of **75%** of the people in Europe and Asia
- **Result:**
 - medical universities created in 9th century
 - Arabs began requiring physicians pass exams & obtain licenses.

Bubonic Plague



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The Renaissance

- Time period 1350–1650 AD
- known as the “**rebirth of the science of medicine**”
- Started human dissections for understanding
- Medical books were published (printing press)
- Causes of disease were still a mystery
- Life span 30-40 y/o



**First Human
Dissection**



**First Printing
Press**



**Guttenberg
bible**



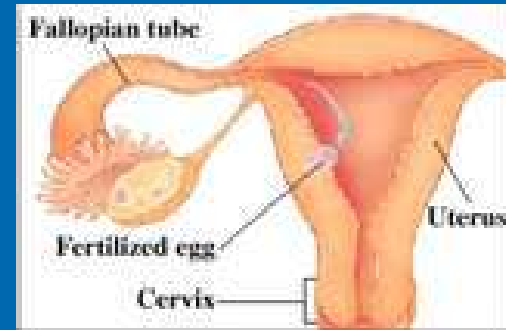
**Martin
Luther**

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The 16th, 17th, & 18th Centuries

Knowledge of human body greatly increased

- **Wm. Harvey:** described circulation of blood
- **Gabriel Fallopius:** tympanic membrane & fallopian tubes.



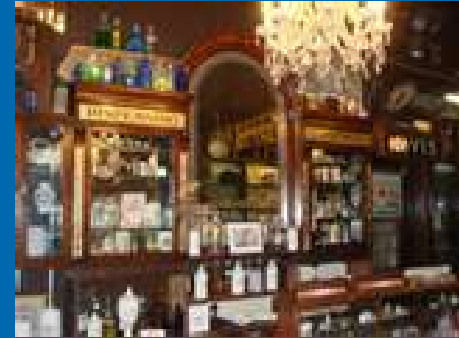
- **Leeuwenhoek:** microscope



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➤ **Apothecaries:** early pharmacists



➤ **Edward Jenner:** smallpox vaccine



➤ **Average life span** 40-50 y/o

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The 19th Century



Industrial revolution brings major medical progress

- **Rene Laennec**: Invention of stethoscope
- **Florence Nightingale**: Founder of modern nursing
- **Pasteur & Lister**: Infection control methods to stop the spread of disease:
- **Elizabeth Blackwell**: first female American physician
- **Clara Barton**: founded American Red Cross



Pasteur



Nightingale



Blackwell



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The 20th Century

- Rapid growth in health care
- X-rays, medicines, and vaccines to prevent disease were developed



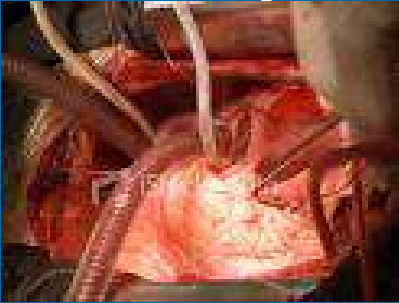
- The structure of DNA and research in gene therapy (ongoing today)
- Health “care plans” and National standards



The 20th Century

(continued)

- **First open-heart surgery 1950s**



- **Computer technology in every aspect of health care**
- **Unlimited possibilities for medical science in the future**
- **Life span** now 60-80 y/o

The 21st Century

- Human genome project
- Embryonic **stem cell** research
- **Viruses** that can cause pandemic (world-wide) epidemics
- Threat of **bioterrorism** with the use biologic agents as weapons



The 21st Century (continued)

- World Health Organization (**WHO**) is dedicated to monitoring health problems to prevent world wide epidemics
- Countries are working together to promote global health awareness

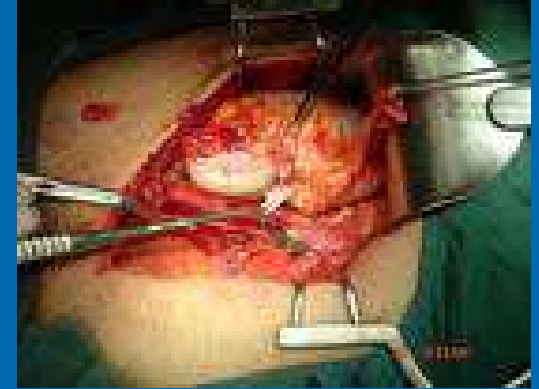


1:2 Trends in Health Care

Frequent changes in health care due to

➤ Technological advances

Heart, Lung, Liver &
Kidney transplants



➤ Aging populations

Older populations need more pharmaceutical products and medical services.

➤ Health-related lawsuits

Health care workers must be **flexible** to face and keep pace with the rapid changes

Cost Containment

- **Purpose:** control the rising cost of health care and achieve maximum benefit for every dollar spent.

Cost Containment Methods

- Diagnostic Related Groups (DRGs)
- Combination of services: HMOs PPOs



- Outpatient services: Surgery Centers
- Mass or bulk purchasing
- Early intervention and preventive services:
Pt edu, immunizations, regular physicals
- Energy conservation

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Cost Containment Issues

- Important not to decrease quality of care
- Workers can decrease costs:
 - look for areas to control **costs** and avoid **waste**
- Consumers can decrease costs
 - take **responsibility** for their own care
 - follow **preventive** measures
 - use services **appropriately**

Home Health Care

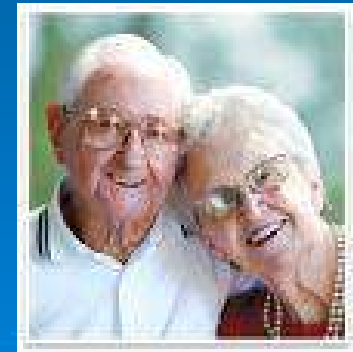
- Industry grew rapidly when DRGs initiated
- Services provided in patient's home
- Visits must be pre-authorized by insurance agency
- Often necessary to teach family members to perform care
- Emphasis on cost containment also applies to home health



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Geriatric Care

- Care for the elderly
- Percentage of elderly population growing rapidly
 - “**Baby Boomers**” 1946-1964 77.3 Million born
- Need for more facilities
- **Omnibus Budget Reconciliation Act (OBRA) of 1987**: requires states to establish competency programs & standards for nursing and geriatric assistance.



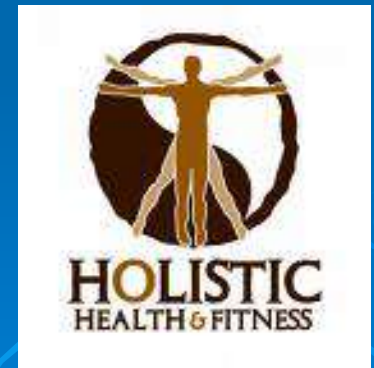
Wellness

State of optimal health

- Physical wellness
- Emotional wellness
- Social wellness
- Mental and intellectual wellness
- Spiritual wellness

Holistic Health

- Treat the **whole body**, mind, and spirit
- Each person is **unique** with different needs
- Use **many methods** to diagnose and treat
- Emphasis on **protection** and **restoration**
- Promote body's **natural healing** processes
- **Patient responsible** for choosing care and worker respects the choice



Complementary and Alternative Methods of Health Care

- Increasingly used to **replace** or **supplement** traditional medical treatment
- **Holistic approach**: belief that the effect on one part effects the **whole** person
- Based on belief that the person has a **life force** or **energy** that can be used in the healing process
- May vary by cultural values or beliefs

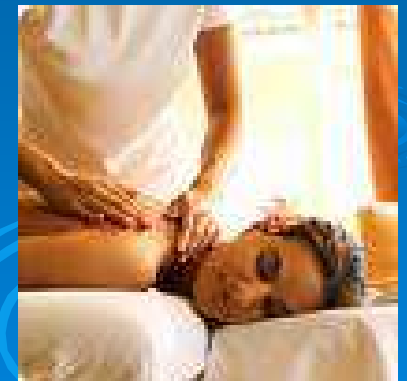
6 Types of Practitioners

- **Ayurvedic:** Indian attempt to find “dosha” body type to prescribe RX with diet, yoga & living practices.
- **Chinese medicine:** based on life energy (Chi) pathways of energy to prescribe acupuncture.
- **Chiropractors:** use of spinal manipulation to adjust position of vertebrae to restore energy.



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- **Homeopaths:** use of small doses of drugs from plant, animal, & minerals to stimulate immune system.
- **Hypnotists:** to make pt receptive to verbal suggestions to make behavior changes.
- **Naturopaths:** use of natural therapies: fasting, diets, lifestyle changes to promote healing & avoid surgery & medications



Types of Therapies

- Refer to Table 1-8 in text
- Most are **noninvasive** and **holistic**
- Often **less expensive** than the more traditional treatments
- **Nonjudgmental attitude** is essential—patients have right to choose treatment
- Increased use requires **increased awareness** by health care workers

NCCAM

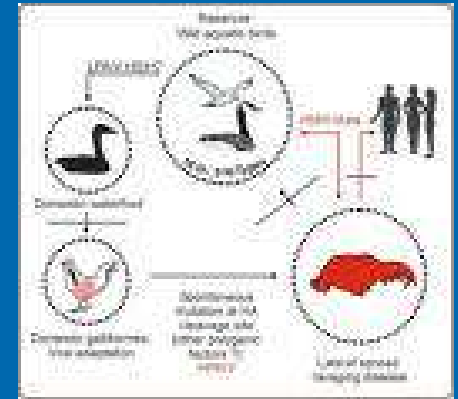
- **National Center for Complementary and Alternative Medicine**
- **Established in 1992** at the National Institute of Health (federal government)
- **Purpose:** research therapies and establish standards of quality care

National Health Care Plan

- **Goal:** ensure that **all** Americans can get health coverage
- **Various plan proposals:**
- **Potential problems:**
 - Costs
 - lack of freedom in choosing coverage
 - more regulation @ both state & federal level

Pandemic

- Outbreak of disease over a **wide geographic area**
- **Influenza** pandemics have occurred throughout history: **1918 Spanish Flu**
 - killed 2.6% of affected pts
 - 40 million people
- H5N1 viruses— **avian flu** virus
 - 50-60% death rate
- Viruses can **mutate** and also exchange genetic information
- **Hantavirus**: spread by rodents



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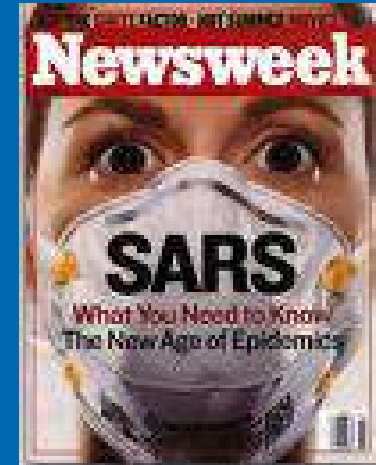
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➤ Severe Acute Respiratory Syndrome (SARS)

- spread by monkeys

➤ Filoviruses: Ebola & Marburg:

- cause hemorrhagic fever



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➤ Government plans

- Education
- Vaccine production
- Antiviral drugs
- Developing protective health measures
- International cooperation

Summary

- Health care has changed and will **continue** to change
- Health Workers must be constantly **aware** of changes that occur
- Workers must make every attempt to learn about **trends**