Emergence of Health Psychology

- Over the last 100 years,
  - significant changes in the nature and perspective of “health and disease” as phenomena and concepts
- 4 general areas of change
  - changes in majors causes of mortality
  - changes in cost to provide medical care
  - changes in defining health
  - changes in models of proper healthcare/delivery

Patterns of Disease and Death

- Infectious Disease & Chronic Diseases
  - *infectious disease*: faster progression/less affected by preventive individual behaviors
  - chronic disease/condition: develop/persist over time, affected/modified by preventive behavior
  - In 1900, 10 leading causes of death,
    - 5 are infectious disease, 5 chronic disease/behavioral
      - influenza/pneumonia, tuberculosis
      - diphtheria, typhoid fever, measles
  - In 1997, 9 are chronic/behavioral, 2 infectious
    - CVD, Cancer, Kidney Disease
    - COPD, Diabetes, Accidents
    - Liver Disease/Cirrhosis, Suicide
    - Alzheimer's
Changing patterns of illness. Trends in the death rates for various diseases during the 20th century reveal that contagious diseases (shown in blue) have declined as a threat to health. However, the death rates for stress-related chronic diseases (shown in red) have remained quite high. The pie chart (inset) shows the results of these trends: three chronic diseases (heart disease, cancer, and stroke) account for 61.9% of all deaths.

Effect of changing patterns of disease

- Shift in attention from Public/Community health concerns to individually mediated health practices
  - public health practices persist (immunization, sanitation of water and trash, hospital facilities)
- Individual Behaviors affect occurrence and progression of disease
- Lifestyle factors could prevent 1 mil deaths/year (+50%)
  - diet, exercise, stress levels, sleep
  - smoking, sexual practices, drinking, etc.
  - personal hygiene (e.g., dental)
- smoking = 400k; diet/inactivity = 300K deaths

Current Major Sources of Mortality & Morbidity

The nine leading causes of death in the United States are shown in this graph. As you can see, eight of the top nine causes are directly related to behavioral risk factors (infection is the exception). At least 45 percent of all deaths can be traced to unhealthy behavior. The percentage of day-to-day health problems related to unhealthy behavior is even higher. (Data from McGinnis & Foege, 1993.)
Factors Contributing to Varying Patterns of Disease/Death in U.S.

- **Age**: leading killers of young and old? Guesses?
  - Leading “killers” 15-24 25-44 years
    - Accidents (40%) HIV/AIDS (19%)
    - Homicide (21%) Accidents (17%)
    - Suicide (14%) Cancer (14%)
    - HIV/AIDS (only 1%) Heart Disease (11%)

- **Ethnic Background**
  - African American Death Rates considerably higher than all other races (AA-Death rates 33rd in world /other races (white), 12th)
  - reasons not completely clear (guesses?)

Varying Patterns of Disease: Age Effects and CHD

Disability and Death from Coronary Heart Disease: Relationships with Education Level and Age*

*3rd System: male employees

SOURCE:
Varying Patterns of Disease/Death

- Social Class / Socioeconomic Status (SES)
  - complex, not uniformly defined
  - education, occupation, income level
- Poverty Kills - Why?
  - Multiple mechanisms at work
    - health care access, cost, availability
    - poorer health habits and unhealthy environment
    - prenatal care worse (low birth weight babies)
    - education: opportunity and self-care

---

![Education Level, Race & Blood Pressure](image1)

**Years of Education, Sex and Serum Cholesterol Levels**

*Source: Health Census Survey, 1980*
Changing Life Spans?

- 1900- lifespan = 47.3 years
- Today = 76 years
- Deceptive statistic- calculating lifespan
- Infant Mortality levels have improved dramatically
  - 162/1000 in 1900
  - 7.3/1000 in 1996!!
  - Based on 1000 persons (all live to 70 years)
  - 1900--> 58.6 year lifespan average
  - 1996--> 69.5 year lifespan average
  - 11 YEAR DIFFERENCE WITHOUT MEDICAL CARE CONSIDERED!!

Lifespan Data

More Living Longer: Health Care Costs Up
- Chronic disease are disease of age...
  - lengthy treatment
  - costly over time
  - technology
  - emphasis on cost-reduction
- Effect-- preventive behavior = cost effective

Psychology and Medicine
- 1911- first APA recommendations to AMA
  - 1960’s-70’s- in roads into medicine
- Psychosomatic Medicine- 1st traces in Med.
  - Emotional/psychological components and contributors to disease development and progression
  - Freud- somatization disorders, e.g., glove anesthesia
  - Cannon- emotional effects on nervous system
  - H.F. Dunbar- coined term “psychosomatic medicine” founded 1st society-
    - personality and disease (CVD in particular)
  - F. Alexander- (protégé of Freud)-
    - personality and disease/target organ damage
Redefining Health

- Define Health (in class)
- Traditional definition
  - Health = “absence of disease/disability”
  - deviation from absence = sick/disease
- Redefining Health
  - WHO definition: “a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity”
    - multidimensional concept
      - biological, social, psychological measures of health

Changing Models of Health

- Changes mirror traditional definitions
- Bio-Medical Model (based on pathogen/germ theory)
  - historically extremely effective
  - focused on removing disease/disability (“germ”)
  - no focus on prevention, well-being
- Biopsychosocial Model of Health
  - physical factors (germs, genetics, reactivity, environ toxins)
  - psychological factors (stress/coping, personality, health habits)
  - social factors (social support, health education, medical care, sanitation/pollution)
The Biopsychosocial Model.
Biological, psychological, and sociological factors interact to produce health or disease.

Legacy of Psychosomatic Medicine

- **Behavioral Medicine**
  - Traditional quite disease/illness oriented
  - multiple disciplines (not only psychologists)
  - Integrate psychology and biomedical science (medicine)

- **Health Psychology**
  - branch of psychology that concerns individual behaviors & lifestyles affecting a person physical health
  - Roots in “Behavioral Health”, preventative/health and wellness focused (may not work with biomedical science)

- **What does a Health Psychologist Do?**
  - Application of psychological principles to improve health
  - Identify conditions that affect health

- **Much Overlap Among Fields** (see journals)