#### **Health Psychology**

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#### What is Health Psychology?

- A subfield of psychology that applies psychological principles and research to the enhancement of health and the treatment and prevention of illness.
- Concerned with social conditions, biological factors, personal traits and lifestyle patterns.

#### What is Health Psychology?

- Health psychology focuses on how biological and social factors affect health and illness.
- Health psychology has become so involved in physical health that many medical centers now employ psychologists and many primary care doctors are increasingly referring their patients to health psychologists as part of a comprehensive approach to primary health care.

#### What is Health Psychology?

Health psychology contributes to our understanding of health and illness through patients' adjustment to serious illness, their health beliefs, which influence their behavior, their mind and body connection, and the psychosocial factors that can reinforce healthy behaviors and prevent negative behaviors.

# Health Psychology is a Subdivision of APA-Division 38

- Division 38: Health Psychology seeks to advance contributions of psychology to the understanding of health and illness through basic and clinical research, education, and service activities and encourages the integration of biomedical information about health and illness with current psychological knowledge.
- The division has a nursing and health group and special interest groups in aging, women, and minority health issues. The division publishes the bimonthly journal *Health Psychology* and the quarterly newsletter, *The Health Psychologist*.
- **Division 38** offers a listing of training programs in health psychology and presents an annual student paper award.

Source: http://www.apa.org/about/division/div38.aspx

#### **Roles of Health Psychologists**

- Analyze the best ways to promote healthy living and disease prevention.
- **Intervene** with psychological assistance when people are diagnosed with serious illness.
- Assess individual attitudes and personality to determine whether it has a negative or positive impact or effect on their health.

#### **Roles of Health Psychologists**

- Studies patients' coping strategies, adjustment to their illness, and how they view their quality of life.
- Health psychologists stress the importance of identifying and treating psychological distress in patients with physical diseases. By doing this, they can treat anxiety, depression or other psychological symptoms that may impede the healing process to promote a more positive attitude for healing.

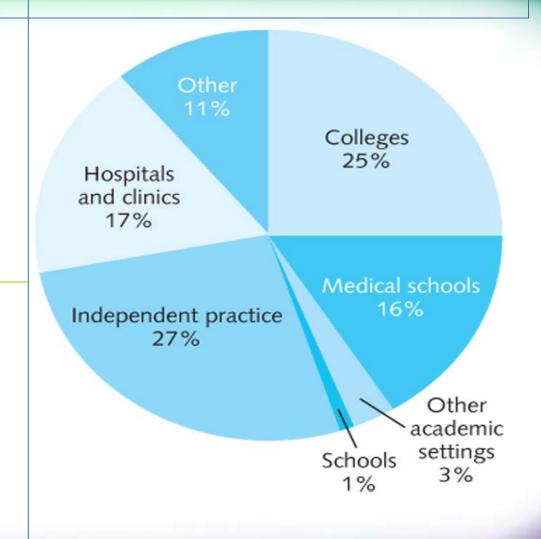
#### **Roles of Health Psychologists**

- Health psychologists promote healthy living and disease prevention through modifications in behaviors and lifestyles.
- Health psychology promotes optimism and a positive outlook.
- Health psychologists promote social support: practical support—rides to the doctor's office, help around the house; emotional support—reassurance, trust and dependence; and, appraisal support—help in figuring out what is happening and how to cope with it. Family support is vital. Patients with no social support tend not to heal and thrive and experience stress.

#### **Health Psychologists**

- Teach, research scientists, clinicians.
- Related Fields, physical therapy and medicine.
- Test biopsychosocial models.
- Promote positive psychology.
- Applied health psychologistsintervention, counseling, clinical, assessment, stress management, etc.

#### **Places of Employment**



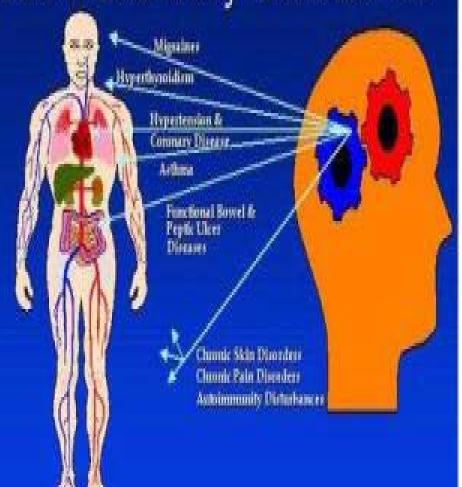
#### **Other Related Fields**

- Epidemiology

   the branch of medicine that studies the frequency, distribution and causes of different diseases with an emphasis on the role of the physical and social environment.
   They also examine morbidity and mortality rates.
- Medical Anthropology—individuals committed to improving public health in societies in poor nations. Interested in medical care in the context of cultural systems.
- Medical Sociology- examines the role of culture and the person's environment in health and illness.

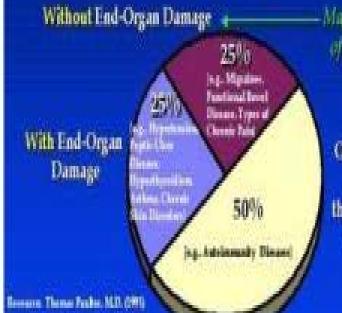
#### 5 Major Aspects to Health Psychology

# The Mind-Body Connection



# Percentage of Outpatient Visits for Psychosomatic Disorders

Physiological Disturbances related to Psychological Factors



May Occupy a Full 50% of the Clinician's Time

Other Physiological
Disturbances
that tend to Flare Up
with Life-Stress

#### 5 Major Aspects to Health Psychology

- Mind-Body Connection—psychological states can affect physical states and vice versa.
- Psychological Adjustment—good adjustment to chronic illness or life stressors is linked to gaining positive control over one's health.
- **Disease Prevention**—the leading causes of death are heart disease, lung disease, cancer and complications from substance abuse. Many could be prevented through modifications in behavior and education.

Note: It is reported that approximately 25% of all cancer deaths and 350,000 heart attack deaths could be avoided annually through the cessation of smoking alone. Diet and exercise also contribute to the onset of many disorders.

#### 5 Major Aspects to Health Psychology Healthy People 2010 Report

#### Table 1.1

#### Preventable Injury and Death

#### The Healthy People 2010 reports that, yearly:

- Control of underage and excess use of alcohol could prevent 100,000 deaths from automobile accidents and other alcohol-related injuries.
- Elimination of public possession of firearms could prevent 35,000 deaths.
- Elimination of all forms of tobacco use could prevent 400,000 deaths from cancer, stroke, and heart disease.
- Better nutrition and exercise programs could prevent 300,000 deaths from heart disease, diabetes, cancer, and stroke.
- A reduction in risky sexual behaviors could prevent 30,000 deaths from sexually transmitted diseases.
- Full access to immunizations for infectious diseases could prevent 100,000 deaths.

Source: U.S. Department of Health and Human Services. (1998). Healthy People 2010. Washington, DC: U.S. Government Printing Office.

#### 5 Major Aspects to Health Psychology

- Optimism—an optimistic attitude and behavior is linked to better reports of physical health and faster recovery from illness.
- **Social Support**—practical, emotional and appraisal support is highly beneficial in health and healing.

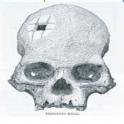
## Questions Pertaining to the Study of Health Psychology

- How do your attitudes, beliefs, selfconfidence and personality affect your physiology and your overall health>
- Why are so many people turning to acupuncture, herbalism and other forms of alternative medicine?
- Do these interventions really work?
- Why do so many people ignore unquestionably sound advice for improving their health, such as quitting smoking, moderating food intake and exercising more?
- Why are certain health problems more likely to occur among people of a particular age, gender, or ethnic group?
- Why is being poor, uneducated, or lonely a potentially serious threat to your health?

#### **A Historical Overview**

Approaches to Health and Disease

#### **Ancient Views**



PREHISTORIC PERIOD Illness caused by evil spirits and treated by trephination. ANCIENT GREECE Illness caused by an imbalance of bodily humors; good diet and moderation in living would cure it.

MIDDLE AGES (476-1450)

Disease was divine punishment for sins, cured by miraculous intervention, invoking of saints, as well as bloodletting.



**1800s** Disease caused by microscopic organisms. Treatment was surgery and immunization.

TWENTY-FIRST CENTURY Biopsychosocial causes of disease. Modern, flexible methods of treatment.

ANCIENT EGYPT Demons and punishment by the gods caused illness. Sorcery and primitive forms of surgery and hygiene were treatments.

ANCIENT ROME (200 B.C.E.)

"Pathogens" such as bad air and body humors caused illness. Treated by bloodletting, enemas, and baths.

ANCIENT CHINA (1100–200 B.C.E.)
Unbalanced forces of nature
caused illness. Treated with
herbal medicine and
acupuncture.



2000 C.E. 200

> RENAISSANCE Disease was a physical condition of the body, which was separate from the mind. Surgical techniques first used.



1920s Disease influenced by mind and emotions and treated by psychoanalysis, psychiatry, and other medical methods.

#### **Ancient Views**

- Trephination
- Emphasis on Hygiene and Bathing (Egypt and Iraq)
- Sewer System-Rome
- First Water System-Roman Baths
- 4 Humors-Hippocrates and then Galen

#### Middle Ages and the Renaissance

- Vesalius-First Anatomical Drawings
- Descartes-Mechanistic Model
- Post Renaissance-Anatomical Theory Disease
- Development of the Microscope by Dutch merchant, Anton van Leeuwenhock(1632-1723)-first to observe blood cells and the structure of skeletal muscles.

#### **Nineteenth Century**

- Cellular Theory-cells malfunction or die.
- First asceptic (germ-free) surgical procedures
- Germ theory of disease-bacteria, viruses and micro-organisms invade the body cells.
- Dentist William Morton, developed an anesthetic for dentistry (gas ether).

#### **Twentieth Century**

- Biomedical Model-illness has a biological cause. Used in the medical field today.
- **Sigmund Freud**—illness could have psychological causes.
- **William James**-the psychology of the healthy mind and the sick soul.
- Focus on pathogens-viruses, bacteria and other microorganisms invade the body.
- Psychosomatic Medicine (conversion disorders, nuclear conflict model. Founders are Franz Alexander and Helen Flanders Dunbar.
- Illness is multifactorial.
- Behavioral medicine (biofeedback).
- Emergence of Health Psychology in 1978.

## Twentieth Century-Psychosomatic Medicine

The American Psychosomatic Society
 (APS)—the first society specifically
 dedicated to the study of the mind-body
 connection. APS was formed to:

"promote and advance the scientific understanding of the interrelationships among biological, psychological, social and behavioral factors in human health and disease, and the integration of the fields of science that separately examine each and to foster the application of this understanding in education and improved healthcare." (APS, 2001)

Publishes Journal of Psychosomatic Medicine.

#### Twentieth Century-Behavioral Medicine

- The Society of Behavioral Medicine (SBM)

   a multidisciplinary, nonprofit organization
   founded in 1978. Studies the influences of
   behavior on health and wellbeing.
- Brings together different disciplines psychology, nursing, medicine and public health—to form an interdisciplinary team.
- Mission statement:
  - "to foster the development and application of knowledge concerning the interrelationships of health, illness and behavior." (SBM, 2001)
- Journal: The Annals of Behavioral Medicine.

#### **Classification of Diseases and Disorders**

 International Classification of Diseases, Ninth Revision (ICD-9)

#### **Health Psychology**

#### Table 1.2

#### **Twentieth-Century Trends That Shaped Health Psychology**

Trend	Result	
1. Increased Life Expectancy	Recognize the need to take better care of ourselves to promote vitality through a longer life.	
<ol><li>Rise of Lifestyle Disorders (for example, cancer, stroke, and heart disease)</li></ol>	Educate people to avoid the behaviors that contribute to these diseases (for example, smoking and a high-fat diet).	
3. Rising Health Care Costs	Focus efforts on ways to prevent disease and maintain good health to avoid these costs.	
4. Rethinking the Biomedical Model	Develop a more comprehensive model of health and disease—the biopsychosocial approach	

# **Non-Western Traditions**

#### **Non-Western Medicine**

### Chinese TOM-Traditional Oriental Medicine

- Internal harmony important to good health.
- Chi=vital energy or life force that ebbs and flows with changes in each person's mental, physical, and emotional well-being. (Acupuncture, herbal therapy, meditation, etc. can restore health by removing blockages and imbalances in chi.

#### **Non-Western Medicine**

#### **Indian Ayurveda**

- Knowledge about longevity.
- Ayuh=longevity; veda=knowledge.
- The Human body represents the entire universe in a microcosm and the key to health is maintaining balance between the microcosmic body and the macrocosmic world.
- Must balance 3 bodily humors or doshas: vata, pitta, and kapha.

#### **Non Western Medicine**

#### **Shamanism-Medicine Wheel**

- The roots of Shamanism can be traced back to some 20,00 years in North America.
- It continues to be used today as a living tradition of health and healing.
- "A shaman walks with one foot in this world and one foot in the spirit world. Our outer world may be different, but our human inner landscape has the same components as always. Our outer health and wholeness is an expression of our inner health and holiness. We are here to bring spirit into matter and matter into spirit."

#### **Shaminism**

- The more one loses contact with this spirit, the more one experiences emotional turmoil and loss of direction.
- Loss of spirit correlates to susceptibility to disease, actual ill health, physically, mentally, emotionally, and spiritually.
- The root cause of all illness is imbalance of a person's soul caused by intrusions by foreign spirits or outright soul loss caused by spiritual or physical trauma.
- Spirit intrusion and soul loss suppresses the body's natural capability to heal itself.
- Soul retrieval is necessary in the case of severe and chronic illness.

#### **Shamanism**

#### SHAMINISM-THE MEDICINE WHEEL

- The one circle illustrates the interconnectedness and need for balance among the four aspects of each human: the emotional, the physical, the mental, the spiritual.
- The four basic elements of all life are also included: water, earth, air, sun or fire.





# **Current Perspectives** and Models

#### **Biopsychosocial Perspective**



 Genetic vulnerability to anxiety



 Reactive nervous system

**BIOLOGICAL MECHANISMS** 

- High levels of actual responsibility at work and home and in the community
- · Lack of social support

SOCIAL INFLUENCES

- High stress levels
- Poor coping skills
- Strong feelings of personal responsibility

PSYCHOLOGICAL PROCESSES

#### Anxiety

- Headaches
- · Racing heart
- Feeling breathless
- · Lump in the throat
- Insomnia

**BEHAVIOR** 

#### **Biological Context**

- Biological Underpinnings such as genetics.
- Evolutionary history plays a role in biology.
- Stress-related illnesses.
- Anger leads to elevated testosterone levels, elevated cortisol levels.

#### **Life-Course Perspective**

- Genetic Age-Related Impacts
- Low birth-weight, smoking malnutrition.
- Genetic influences on an offspring's life.
- Causes of death and disease by age.

#### **Psychological Context**

- Psychological Impacts.
- The ability of the individual to cope with daily events and stressors.
- Lack of ability to cope psychologically takes a greater toll on one's life.
- Importance of mind and attitude.
- Learning to manage emotions and stress is important.

#### **Social Context**

- Importance of social support.
- Impact of culture and values on health and disease.

#### Table 1.3

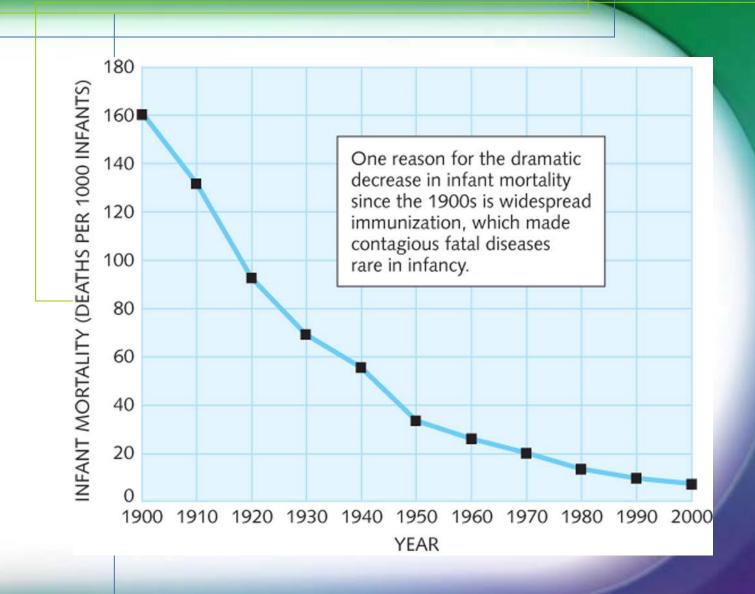
The 10 Leading Causes of Death in the United States, 1900 and 2001

1900	Rate per 100,000	2001*	Rate per 100,000
Heart disease and stroke	345	Heart disease	245.8
Influenza and pneumonia	202	Cancer	194.4
Tuberculosis	194	Stroke	57.4
Gastritis	143	Chronic lower respiratory diseases	43.2
Accidents	72	Accidents	35.7
Cancer	64	Diabetes mellitus	25.1
Diphtheria	40	Influenza and pneumonia	21.8
Typhoid fever	31	Alzheimer's disease	18.9
Measles	13	Nephritis and nephrosis (kidney disorders)	13.9

Sources: Historical Statistics of the United States: Colonial Times to 1970, Pt. 1, by U.S. Bureau of the Census, 1975, Washington, DC: U.S. Government Printing Office; "Deaths: Final Data for 2001," by Arias, E., Anderson, R.N., Kung, H., Murphy, S., & Kochanek, K.D.. 2003, National Vital Statistics Reports, 52(3), p. 8.

<sup>\*</sup> Note that the leading causes of death in 2001 were not new diseases; they were present in earlier times, but fewer people died from them or they were called something else.

#### Infant Mortality Rates in the U.S.



#### **Gender Perspective**

- Women outlive men and are more likely to seek health care early.
- Less attention to women and blacks in medical care— Why??

#### **Biopsychosocial Systems**

- Emphasizes the mutual influences among the biological, psychological and social contexts of health.
- Systems theory of behavior.understanding health in the context of a hierarchy of systems.

### A Biopsychosocial Model of Alcohol Abuse



 Genetic predispositions



Alcohol sensitivity

**BIOLOGICAL MECHANISMS** 

- Stressful events
- Culture/environment that promotes excessive drinking
- Individualistic culture that encourages self-blame for personal failure.

SOCIAL INFLUENCES

- Negative thinking
- Self-defeating beliefs



PSYCHOLOGICAL PROCESSES

Alcohol abuse

**BEHAVIOR** 

#### **Complementary and Alternative Medicine**

- Acupuncture
- Aromatherapy
- Ayurveda
- Chiropractic
- Dietary Supplements
- Electromagnetic Therapy
- Energy Medicine
- Homeopathy
- Massage
- Naturopathic Medicine
- Qi gong
- Reiki
- Therapeutic Touch