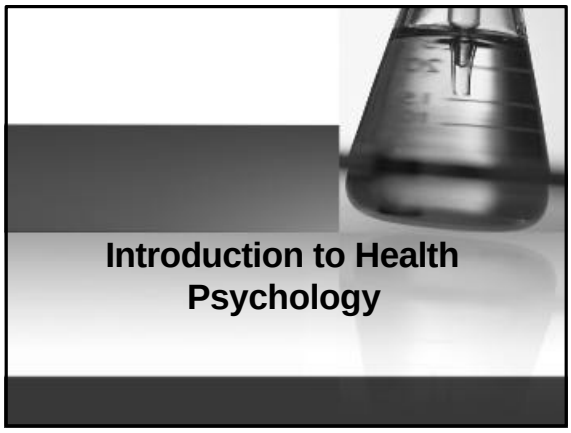



## Outline

- Definition
- History
- Biopsychosocial model & Stress
- Interventions: Coping

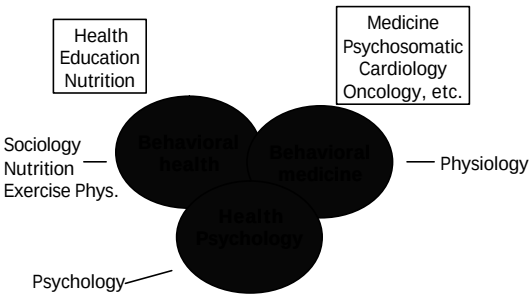
## Definition: Health Psychology

- Study of social, behavioral, cognitive, and emotional factors that *influence* the:
  - Maintenance of health
  - Development of illness and disease
  - Course of illness or disease
  - Patient's and family's response to illness and disease
- Amended to include psychologists' contribution to health care systems & policy

## Health Psychologist

- Scientists who research the area
- Health promotion – intervene at the social (e.g., government policy, community) or individual level to promote health and *prevent* illness and disease.
- Clinical health psychologist – intervene at the individual level to treat illness, slow or prevent disease progression, and reduce disability.

## Relationship of health psychology to other health-related fields



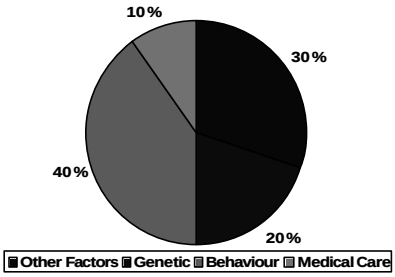

## Important Contributions of Psychology to Health

- Has provided techniques useful in changing behaviors that affect health and illness.
- Is committed to keeping people healthy rather than waiting to only treat them when they become ill.
- Long history of developing reliable and valid measures for assessing health-related factors.
- Has contributed a solid foundation of scientific methods for studying such behaviors.

## World Health Organization Definition of Health (1948)

*"A complete state of physical, mental, and social well-being and not merely the absence of disease and infirmity."*

## Estimated contributions of different factors to health status.



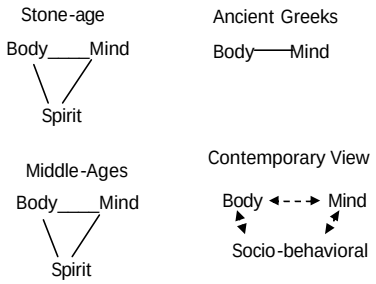
## Evolving view of diseases

- Anatomical pathology
  - Belief that disease was localized in anatomy (1600's to 1800's)
- Tissue pathology
  - Specific tissues could become diseased while others remain healthy (Late 1800s)
- Cellular pathology
  - Belief that life resided in cells and so cells must be the place to look for disease (early 1900's)

## Evolving view of diseases

- Germ theory (mid 1800's - early 1900's)
  - Discovery that particles in the air that could not seen (e.g., bacteria) could cause disease.
- Magic bullet (middle 1900's)
  - A specific cure could be found for every ailment that restore the person to perfect health.
- Biopsychosocial model (late 1900's +)
  - Mind, body, and environment interact in causing disease.

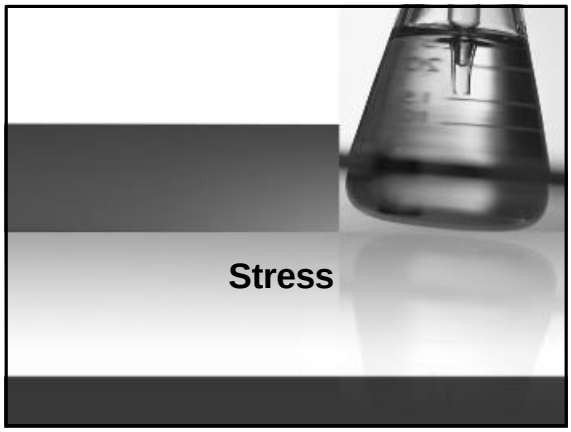
## History of Medicine



## Biopsychosocial Model of Disease

## Biopsychosocial Model

- Psychological component
  - Behavior (adoption and maintenance)
  - Emotional (feelings)
  - Cognition (thoughts, beliefs, and attitudes)
  - Personality – characteristic ways of thinking and feeling




## Three Views of Stress

1. Focus on the environment: stress as a stimulus (stressors)
2. **Reaction to stress: stress as a response (distress)**
3. Relationship between person and the environment: stress as an interaction (coping)

## Fight or Flight Response

**Increase in**

- Epinephrine & norepinephrine
- Cortisol
- Heart rate & blood pressure
- Levels & mobilization of free fatty acids, cholesterol & triglycerides
- Platelet adhesiveness & aggregation

**Decrease in**

- Blood flow to the kidneys, skin and gut

## Selye's General Adaptation Syndrome (1956, '76, '85)

**Perceived Stressor** ▸ Alarm Reaction •Fight or flight ▸ Resistance •Arousal high as body tries defend and adapt. ▸ Exhaustion •Limited physical resources; resistance to disease collapses; death

**If stress continues ….**

## Cognitive Model of Stress Lazarus & Folkman

- Potential stressor (external event)
- Primary appraisal – is this event positive, neutral or negative; and if negative, how bad?
- Secondary appraisal – do I have resources or skills to handle event?
- If No, then ***distress***.

## Learned Helplessness – Seligman, et al.

- Dogs exposed to unavoidable shocks
- Following exposure, when placed in a situation where they can now jump to avoid the shock, they fail to make the escape response.
- Learned helplessness occurs when one perceives that one's actions does not lead to the expected outcome

## Job Strain – Karasek et al., 1981

| | | Demands | |
|---|---|---|---|
| | | High | Low |
| Control | High | | |
| | Low | STRAIN | |

## Biopsychosocial Aspect of Stress

- How stress affects health
  - Via behavior
  - Via physiology

## Behavioral Aspects

- Increased alcohol
- Smoking
- Increased caffeine
- Poor diet
- Inattention leading to carelessness

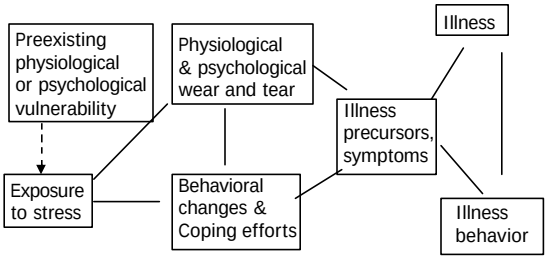
## Physiological Aspects

- Cardiovascular reactivity – increased blood pressure, platelets, lipids (cholesterol)
- Endocrine reactivity – increased catecholamines and corticosteroids
- Immune reactivity – increased hormones impairs immune function

## Psychophysiological Disorders

- Digestive system – e.g., ulcers, irritable bowel syndrome
- Respiratory system – e.g., asthma
- Cardiovascular system – e.g., hypertension, lipid disorders, heart attack, angina

## Stress-Illness Relationship



## What is coping?

- Process of managing the discrepancy between the demands of the situation and the available resources.
- Ongoing process of appraisal and reappraisal (not static)
- Can alter the stress problem OR regulate the emotional response.

## Emotion-Focused Coping

- Aimed at controlling the emotional response to the stressor.
- ***Behavioral*** (use of drugs, alcohol, social support, distraction) and ***cognitive*** (change the meaning of the stress).
- Often used when the person feels he/she can't change the stressor (e.g., bereavement); or
- Doesn't have resources to deal with the demand.

## Problem-Focused Coping

- Aimed at reducing the demands of the situation or expanding the resources for dealing with it.
- Often used when the person believes that the demand is changeable.

## Problem-Focused Coping

- Planful Problem-Solving – analyzing the situation to arrive at solutions and then taking direct action to correct the problem.
- Confrontive Coping – taking assertive action, often involving anger or risk taking to change the situation.

## Emotion-Focused Coping

- Seeking social support – can be either problem or emotion-focused coping.
- Distancing – cognitive effort to detach
- Escape-avoidance – wishful thinking or taking action to escape or avoid it.
- Self-control – attempting to modulate one's feelings in response to the stressor.
- Accepting responsibility – acknowledging one's role in the situation while trying to put things right.
- Positive reappraisal – create positive meaning.

## Cognitive Re-structuring

- Process by which stress-provoking thoughts are replaced with more constructive ones.

## Gender and Coping

- Men generally employ problem-focused coping strategies more than emotional focused strategies.
- Opposite for women, with women more often employing emotion-focused strategies.
- If men and women in same occupation, gender differences disappear, suggesting that societal sex roles influence choice of coping strategies.

## Socio-economic Status (SES) and Coping

- People with higher SES tend to use problem-focused coping strategies more often (Billings & Moos, 1981).
- Why do people who have lower SES use problem-focus coping strategies less often than those with high SES?

## Social Support

- Emotional support – expression of empathy, understanding, caring, etc.
- Esteem support – positive regard, encouragement, validating self-worth
- Tangible or instrumental – lending a helpful hand.
- Information support – providing information, new insights, advice.
- Network support – feeling of belonging

## Threats to Social Support

- Stressful events can interfere with your ability to use social supports.
- People under stress may become so focused on talking about their problems that they drive their support systems away.
- Supports agents may react in a way that makes the problem worse.
- Support providers may be adversely effected by providing support.

## Alzheimer's Disease – Effect on Caregivers

- 81% of caregivers were providing care.
- 56% reported caregiver strain.
- Mortality – 9.4% in non-caregivers; 17.3% in 'caregivers' not providing care; 13.8% in non-strained caregivers; and 17.3% in strained caregivers.

## Generally Social Support Associated with Good Effects

- Increase survival rates in women who have breast cancer.
- Lower blood pressure
- Decrease risk of mortality

## Stress Management – teaches coping techniques

- Reduce harmful environmental conditions
- Teaches techniques by which person can develop stress tolerance.
- Helps client maintain a positive self-image.
- Help maintain emotional equilibrium.
- Help client maintain or develop satisfying relations with others.

## Cognitive Therapy – Albert Ellis, Aaron Beck

- Assumes that stress arises or is augmented by faulty or irrational ways of thinking.
  - Catastrophizing – "It is awful if I get turned down when I ask for a date".
  - Overgeneralizing – "I didn't get a good grade on this test. I can't get anything right".
  - Selective abstraction – Only seeing specific details of the situation (e.g., Seeing the negatives but missing the positive details).

## Cognitive Therapy

- Often these irrational beliefs or faulty thinking errors stem from past "programming".
  - E.g., All my previous relationships have failed so therefore I am unlovable.
- Hypothesis testing – client is encouraged to test out these irrational beliefs by collecting evidence for or against the belief.

## Relaxation Therapy

- Aims to either reduce hyperarousal or curb emotional-physiological reactivity.
  - Progressive muscular relaxation
  - Mental imagery
  - Meditation