Tues Sept 4, 2007:

Loose ends:

Discussion of Engel's article and material related to the emergence of health psychology. Went over slides from last weeks lecture that did not show in powerpoint.

HEALTH BEHAVIORS & HEALTH PROMOTION

I. HEALTH PROMOTION OVERVIEW – only 4% of health care dollars spent on prevention/health promotion

a. **Example: Jill**
b. **Overview:** promotion of healthy lifestyle and prevention of illness, cost effectiveness, individual, medical system, media, legislation, environment, community, public health strategies
c. **Role of Behavioral Factors:** risk factors, modification of health behaviors, pattern of preventable disorders, role of lifestyle and behavior
d. **CDC data:** obesity, exercise, smoking, risk factors for cancer and other chronic diseases
e. **Health Behaviors and Health Habits**
f. **Modification of Health behaviors**

II. EPIDEMIOLOGY: How do we determine which health habits contribute to morbidity and mortality? Epidemiology is the scientific study of the distribution and frequency of disease and injury. It is used to determine the occurrence of illness and organizes data in terms of when the disease occurred, where, and to which age, gender, racial groups and helps to identify which behavioral factors are related to the disorder.

Mortality- # of deaths due to a specific cause.
Morbidity- # of cases of a disease or condition (illness, injury, or disability- departure from wellness)
Prevelance- total number of existing cases of a disorder, includes both old and new cases
Incidence - number of new cases during a period of time.
Risk factors- psychological, physiological, social & environmental events related to incidences and prevalence
Criteria for causality- strength of the relationship (relative risk), specificity, temporal relationships, coherence (biological sense and dose response relationship), and impact of preventive clinical trials.
Relative risk - strength of relationship between a risk factor and rates of morbidity or mortality - derived from the proportion of 2 groups' rates, one with the risk factor and other matched group. Misleading because number of persons with risk factor may be small, of limited prevelance.
Population attributable risk - stat reflecting the societal burden of the risk factor in terms of unnecessary morbidity/mortality & estimates # of lives that would be saved.

III. WINETT (1995) FRAMEWORK FOR HEALTH PROMOTION -Developed a framework for designing health promotion programs that prevent morbidity and mortality in large numbers of people.
National Goals - He argues that health psychologists should be guided by nation goals set up by Healthy People 2010. IDs priority areas, identifies health status, risk reduction, service and protection goals.

1) increase span of healthy life
2) decrease disparities between different populations
3) provide universal access to preventive services

Winett encourages psychologists to become involved in 2010 prevention interventions, if they focus on high priority area and use realistic interventions with demonstrated efficacy.

IV. PREVENTION - we usually think of prevention occurring before an illness takes hold, but there are actually 3 levels of prevention (Leventhal et al 1985). The type of prevention can be considered a timing dimension which varies with level of analysis/intervention
1) Primary Prevention - actions taken to avoid disease or injury, e.g., seatbelts, immunization,
2) Secondary Prevention - actions are taken to identify and treat an illness or injury early with the aim of stopping or reversing the problem (physical exams, lab tests - mammograms annually after age 50, less frequently in younger women. Id risk factors or early signs of disease by screening & early intervention.
3) Tertiary Prevention -interventions to contain or retard the damage caused by a serious injury or a disease that has progressed beyond the early stages and causes lasting or irreversible damage, e.g., medication and physical therapy exercise for pts with severe arthritis to prevent further loss of function

Prevention interventions will promote change when they are properly timed, focused on the right level of analysis, and have well formulated goals/target pop (intervening with high risk groups vs. gen pop, stage of change). Psychologists need to modify interventions to match timing and level of analysis, too often we focus on tertiary prevention and individual level interventions without considering cost-effective group/environmental/ public health interventions.

V. MODALITIES OF INTERVENTION

A. Intervening with Children & Adolescents - educate young to prevent the development of poor health habits, *teachable moments,* concrete instructions, children of age 3-4 can learn to develop better health habits Junior high = smoking, food preferences, snacking, dieting, etc.

B. Intervening with At-Risk Populations -People vulnerable to health problems due to genetics (breast cancer, Huntington's,history of cardiac disease) , health habits (smokers), or family setting (obese parents). Ethical issues: alarm, ethnic & gender diffs, lack of personal control

C. Community Wide -mass media to educate and change behavior. Can attempt to restructure the environment so that cues and reinforcements for risky behaviors are replaced by cues for healthy behaviors e.g., community-based programs to reduce heart disease

D. Mass Media - reaches larger audience, but limited success: some attitude change, minor behavior change.

D. Individual and Small Groups- traditional, interact one-on-one. Criticized for being inefficient, noncost-effective, social class bias.

E. Worksite Interventions -to reach adults

1) health promotion programs: smoking cessation, stress reduction, dietary change exercise, weight control, hypertensions, substance abuse.

2) restructure environment: ban smoking, providing health clubs,

3) *reduced insurance premiums* for nonsmokers

4) *total wellness programs* (Cataldo et al, 1986)

F. Public Policy -effects whole populations of individuals by creating rules and regulations that require certain health promoting behaviors, e.g., wearing seat belts, restricting smoking on flights, in government buildings,

G. Multimodal Approach Advocated. need to use less expensive methods, such as working along side physicians' in their offices, schools, worksites, and communities.

VI. BARRIERS TO EFFECTIVE HEALTH PROMOTION

A. Medical Barriers - Prevention is usually not taught in medical school. Third party payers often do not reimburse for prevention programs. Time consuming and requires interdisciplinary efforts and coordination Until recently, lacked formal diagnostic measures of health risk behaviors.

B. Individual Barriers -

1) Parental models - smokers beget smokers, obese beget obese, etc.

2) Unrealisitic Optimism - overestimate the degree of control over health. Underestimate the role of uncontrollable factors: genetics and environmental risks. Overestimate frequency of poor behaviors in others.

C. Health Habit Barriers

1) Lack of Research

2) Independence. Health habits are relatively independent

3) Unstable over time. drinking, weight control, smoking tend to relapse.

a) Different health habits controlled by diff factors

b) Individual differences in factors determining behavior

c) Factors controlling health behavior may change overtime in person

VII. DETERMINANTS OF GOOD HEALTH BEHAVIOR

A. Demographic Variables -Younger, affluent, better-educated, low levels of stress, social support (married, church). While low SES, higher levels of stress & less social support are related to higher levels of health compromising behaviors, smoking, ETOH abuse, little exercise, poor sleep,

B. Early Socialization- modeling by parents

C. Values -of SES or subculture

D. Social Influence - family, friends colleagues

E. Emotional factors - overeating linked to stress for some obese

F. Personal Goals -

G. Perceived Symptoms - flabby --> exercise

H. Access to the Health Care System - medical preventive health behaviors are moderately correlated, all influenced by access to services.

I. Cognitive factors - beliefs that behaviors are beneficial, perceived threat

J. Individual Diffs -

a) Age Differences -omnipotent when young adult, structure of childhood promotes good habits then.

b) Locus of Control - internal or external factors control reinforcement.

Internal = more likely to believe that their own behavior determines reinforcement outcomes. Seems they seek out more info, but weak unless person holds strong health values.

External = reinforcement is controlled externally

V. Critical Analysis of Health Promotion

MODIFICATION OF HEALTH BEHAVIORS

I. CHANGING HEALTH ATTITUDES- assumed that if you can change a persons attitude about their health behaviors, they will be motivated to change that behavior (Hovland et al., 1953).
Four factors: 1) the characteristis of the communicator, 2) the characteristics of the message, 3) channel of communication, and 4) characteristics of the audience.
1) FEAR -most people believe that *fear* is effective, yet create less attitude and behavior change than more positive approaches.
a) Fear is not sufficient -may event have the opposite effect
-- ignore or deny the problem if too anxious and given no means of solving it. **--** effects are short-lived, habituate to fear messages
-- fear can inhibit behavior
b) Fear effective when: 1) threat seems immediate and likely; 2) people must be given recommendations for action and information about the efficacy of these health behaviors. Without an alternative course of action, the impact of fear declines or boomerangs.
c) Fear may not be necessary - information alone or with a positive appeal

2) INFORMATIONAL APPEALS-
a) Communications - colorful, vivid case examples, avoid stats
b) Source- expert, prestigious, honest
c) Discuss both sides if no concensus, but not if in agreement
d) Strong points made at the beginning and end
e) message = short, clear, direct
f) explicit conclusions
g) extreme messages more effective, but limit

Limits of informational appeals are due to the complex multistage process of attitude change: attention, comprehension, yielding, retention, and action recommendations. Links between attitudes and behavior are complex.

II. CHANGING HEALTH BELIEFS -
A. Health Beliefs Model (Rosenstock, 1966,Hochbaum,1958)
1. Perceived Threat- influenced by 3 factors: a) general health values, b) perceived susceptibility, and c) perceived severity.
2.. Efficacy of the Behavior - people must then decide what to do when they feel threatened. *Perceived benefits and barriers:* What is in it for me? Draw backs?
3. Self-Efficacy -the belief that one can successfully accomplish the action required to achieve a goal...a sense of personal control. People high in self-efficacy are more likely to initiate and sustain behavior change, important in maintaining long-term goal directed behavior, such as lifestyle change.
4. Applications: smoking cessation, breast self-examination, compliance with diabetic regimens, AIDS prevention, saftey belt promotion weight control, radon testing, health habits of the elderly, use of condoms, & exercise.
5. Criticisms: accounts for behaviors only in terms of attitudes and beliefs, neglecting important environmental and social factors.

III. CHANGING BEHAVIORAL INTENTIONS
A. THEORY OF REASONED ACTION -predict behavior by knowing a person's specific behavioral intentions, a person's commentment to act, which is strongly predictive of actual behavior (Fishbein & Ajzen, 1980). Rather than suggest that attitudes alone predict intentions and behavior, Fishbein & Ajzen suggest that intentions are the products of 3 factors:
1) Attitude toward the behavior -a consequence of the belief that the behavior will lead to certain outcomes, and that this outcome is positive.
2) Subjective norms -a social factor, response to social pressure
3) Perceived control - self-efficacy and deals with the question of resources and opportunities. It is a necessary condition for action (now called **theory of planned behavior**, Ajzen, 1985, 1986)
4) Specificity of Behavioral Intentions -measured at a very specific level to obtain a detailed map of how the intention is related to the health behavior.
5) Applications - condom use, high blood pressure, family planning, breast and testicular self-examinations, mammography participation, substance abuse, medication adherence, cancer screening, daily health habits, sunscreen use. Like the Health Beliefs Model, but allows more precise measurement of concepts and specifies paths of causation. Focuses on intention to act as a key mediator between attitude and behavior change and external social factors, rather than simply internally perceived threats

CONCLUDE: Both models influential, cognitive: actions are guided by our interpretation of events, not the environmental events per se. Useful in predicting when people will be motivated to change health behaviors, but doesn't account for the process involved in voluntarily acquiring and maintaining health behaviors (Kirscht, 1983).