

## Health Models and Behaviors

## Outline

- What is health? Illness? Wellness? Health Behaviors?
- Health attribution
- Psychological patterns and health
- Locus of control and health
- Health Belief Model
- Stages of Change

## Health?



## A Few Definitions

- **Health** is a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity  
(WHO, 1946)
- **Wellness** is an active process of becoming aware of and making choices toward a more successful existence  
(Hettler, n.d.)

## Definitions

- **Preventative health behavior:**
  - Activities undertaken by “healthy” people to:
    - Increase health
    - Prevent disease
    - Detect disease at an asymptomatic stage  
(Kasl & Cobb, 1966)

## Definitions

- **Illness:** a condition of pronounced deviation from the normal healthy state
- How does someone make the decision that s(he) is ill?
  - 1.)
  - 2.)
- Illness is subjective

## Health Behaviors

- We may act to promote health by:
  - Engaging in wellness activities
  - Receiving chiropractic care
  - Getting enough sleep
  - Eating a balanced diet
- We may avoid ill health by:
  - Not smoking
  - Practicing safe sex
  - Wearing seatbelts and crash helmets
  - Washing our hands and brushing our teeth



## Attribution

- So how do we make sense out of the obvious variation in health around us?
- Attribution theory may help us understand some people's behavior
- When people ask themselves, "Why am I healthy?", they come up with a reason why
- Their future behavior depends on the type of attribution they assign
- **Why are you healthy?**



## Attribution

- Some people will attribute their state of health to living a healthy lifestyle
- **However, is it true that if we lead a healthy lifestyle then we will remain healthy?**



## Health Behavior

- Illnesses are influenced by **lifestyle factors** such as diet, alcohol intake, smoking, and exercise
- If we want to increase our chances of remaining healthy, we may be able to adopt healthy behavior into our lifestyle
- This would mean a balanced diet, exercising, drinking in moderation, and not smoking
- Do chiropractors advise people on healthy behaviors?



## Health Behavior

- If patients are not sure that "experts" are certain about the relationship between health and healthy behavior, they may be less likely to behave in a healthy way
- Should women drink red wine?



## Health Behavior

- Healthy behavior does not guarantee good health
  - There are many reasons why people do not enjoy good health in spite of behaving in a healthy way (?)
  - When we attempt to change health behavior, we must also take into account the degree to which these other factors influence health and health behaviors





“We can not change the cards we are dealt, just how we play the hand.”

Randy Pausch Last Lecture  
(p. 17, 2008)

[http://www.youtube.com/watch?v=ji5\\_MqicxSo](http://www.youtube.com/watch?v=ji5_MqicxSo)



## Health Behavior

- We tend to practice some health habits but not others
- Health behavior is not always rational or logical
- People are inconsistent in their health habits
- People often postpone health behaviors
- Why?



## Health Behavior

- American Academy of Family Physicians conducted a survey of 1,000 Americans seeking to find out what Americans know about staying healthy
    - *“Although most Americans have a strong grasp of the importance of healthy behaviors, a good many of them still don't do what they know they should be doing”*
- (McCanse Borgmeyer, 2003)



## Health Behavior

- Why are Americans not doing what they know they should be doing?
  - A lack of will power
  - Lack of time
  - Having a stressful life
  - Existence of health concerns
  - Belief that “I won't get sick”
  - Cost

(McCanse Borgmeyer, 2003)



## Psychological Factors and Health

- Predispositions to think, feel, and act in particular ways – **personality** (Type A Behavior Pattern?)
  - Highly stressed people may be perceived as being at risk for heart attacks
  - 1950s cardiologists Friedman and Rosenman first described TABP
  - Certain personality characteristics have been associated with risk for heart attacks



## Psychological Factors and Health

- Type A Behavior Pattern:
  - Highly competitive
  - Sense of time urgency
  - Achievement striving
  - Impatient with delays
  - Try to do several things at once
  - Chronically aroused
  - **\*Chronic hostility, anger, aggression, basic distrust of others**

## Psychological Factors and Health



- Hostility and chronic heart disease
  - 255 medical students filled out a measure of hostility
  - 30 years later their health status was assessed
  - Results: Fivefold increase in CHD incidence among those physicians with the higher hostility scores
  - Number of deaths – 6 times greater among those with the most hostility

(Barefoot et al, 1983)

## Psychological Factors and Health



- Would psychological intervention to change Type A behavior reduce the risk of coronary heart disease?
  - Studies show it may (Dean Ornish's program)
  - However it may be harder to persuade healthy people to modify their behavior by stress management if they are rewarded by society for Type A behavior

## Personal Control Models



- People differ in their views about their health
- **Locus of control** – Some people see it as something over which they have a great deal of control and others may be content to leave the control of their health in the hands of health professionals
- Personal control is made up of a person's beliefs about how well he or she can bring about good events or avoid bad events

## Personal Control Models



- People with a high level of personal control are more likely to:
  - have a healthy lifestyle
  - seek and follow a health professional's advice when ill

## Personal Control Models



- Locus of Control
  - On one end of the scale, people believe that they are responsible for their own destiny and can control their own behavior and therefore their health (**internal** locus of control)
  - At the other end of the scale, people believe that their lives are controlled by external events beyond their control, such as powerful others or fate (**external** locus of control)
- Which locus of control type would you like to see in your offices?

## Personal Control Models



- Individuals with higher **internal locus** of control tend to:
  - Cope better with life's crises
  - Have more social support that buffers them against illness
  - Have a more competent immune system
  - Report feeling more positive emotion

## Personal Control Models

- Which type of patient (internal or external locus of control) do you expect to see in your office?
- Does chiropractic care encourage a patient to have an internal or an external locus of control?

## Health Behavior

- People are not consistent in their health habits
  - They make resolutions but fail to keep them, or they postpone attempts at giving up smoking or losing weight
  - Why?

## Health Belief Model (HBM)

- According to the HBM, the following beliefs explain and predict health-related behavior:
  - Perceived personal susceptibility
  - Perceived severity
  - Perceived benefits
  - Perceived barriers
  - Cues to action
  - Self-efficacy

## Health Belief Model (HBM)

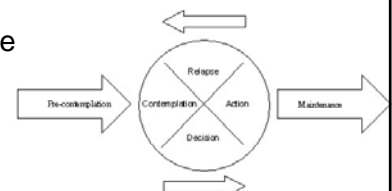
- Perceived personal susceptibility (“What are the chances that this could happen to me?”)
- Perceived severity (“How serious could it be if it did happen to me?”)
- Perceived benefits (“So if I comply with the health recommendation, will it work? What are the chances that it will work?”)
- Perceived barriers (“How much will the recommended action cost?”)
- Cues to action (“I’m ready, but what’s the plan?”)
- Self-efficacy (“Can I do it?”)

## What do you need to do to be healthier?



## Stages of Change Model

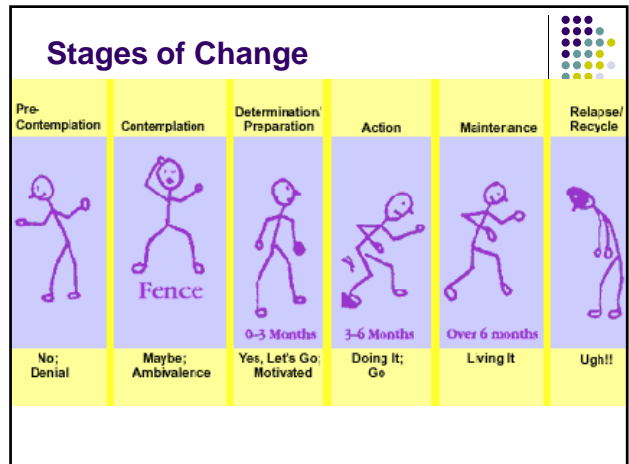
1. Precontemplation
2. Contemplation
3. Preparation
4. Action
5. Maintenance



Pros for making change	Cons for making change
Pros for NOT making change	Cons for NOT making change

- ### Stages of Change Model
1. Precontemplation: Patients in this stage have no intention to change. They're either unaware or underaware of their problems
  2. Contemplation: Patients are ambivalent. They recognize that a problem exist and are thinking about doing something about it, but have not made a commitment
  3. Preparation: Patients at this stage are intending to take action in the next month. The patient is exhibiting both intention and behavior towards a health goal

- ### Stages of Change Model
4. Action: Patients are committed (time, energy, resources). Patients are actively changing their behavior, experiences, and/or environment to address their problems
  5. Maintenance: Patients work toward preventing relapse and consolidating gains
- \*Relapse



### References

Barefoot, J.C., Dahlstrom, W.G., & Williams, R.B. (1983). Hostility, CHD incidence, and total mortality: A 25 year follow-up study of 255 physicans. *Psychosomatic Medicine*, 45,59-63.

Booth-Butterfield, S. (1996). *Attribution theory*. Retrieved March 12, 2008, from Healthy Influence: Communication for Change Web site: <http://www.as.wvu.edu/~sbb/comm221/chapters/attrib.htm>

Hettler, B. (n.d). National Wellness Institute. Six dimensions of wellness. Retrieved on 11/01/07 from <http://www.nationalwellness.org>

Kasl, S. V., and Cobb, S. (1966). Health Behavior, Illness Behavior, and Sick Role Behavior. *Archives of Environmental Health* 12:246-266,531-541

McCanse Borgmeyer, C. (2003). Changing health behaviors can be tricky survey shows. *FPRreport*, 9. Retrieved on March 13, 2008, from AAFP Web site: <http://www.aafp.org/fpr/20030500/9.html>

Pausch, R. (2008). *The last lecture*. Hyperion: New York.