Cardiovascular Disease in Women: Health Behavior Change

Key Elements of a "Behavioral" Approach

- Treats non-adherence as a multivariate problem
- Shifts control from provider to patient
- Employs both positive and negative reinforcement to influence behavior

SOURCE:
(1) Leventhal H. (1993). Theories of compliance, and turning necessities into preferences: Application to adolescent health action. In: N.A. Krasnegor, et al (Eds.), Developmental Aspects of Health Compliance Behavior (pp.91-124). WHO, 2003.

The most effective adherence-enhancing intervention directed at patients aim to enhance self-regulation or self-management capabilities.

Over the long term patients must rely on themselves to maintain their behavior.

Preceding events and consequences influence a patient's behavior.

Positive reinforcement: value and benefits of treatment.

Negative reinforcement: progression of the disease.

Behavioral Model: Information-Motivation-Behavior Skills Model

- Includes both information and motivation
- Can be applied in a variety of clinical settings

SOURCES:
(1) Fisher JD, Fisher WA. (1992). Changing AIDS-risk behavior. *Psychological Bulletin*, 111, 455–474.

(2) Fisher JD et al. (1996). Changing AIDS risk behavior: Effects of an intervention emphasizing AIDS risk reduction information, motivation, and behavioral skills in a college student population. *Health Psychology*, 15, 114-123.

(3) Carey MP, et al. (1997). Enhancing motivation to reduce the risk of HIV infection for economically disadvantaged urban women. *Journal of Consulting and Clinical Psychology*, 65(4), 531-541.

(4) Mazzuca SA. (1982). Does patient education in chronic disease have therapeutic value? *Journal of Chronic Diseases*, 35, 521-9.

This model illustrates the need for both information and motivation to impact behavior change. Information is basic knowledge about medical condition and its management.

Motivation includes personal attitudes towards adherence behavior.

Behavioral skills include social support and other self-regulation strategies.

What to Change? Adverse Behaviors

- Most of the *Heart Truth* lifestyle interventions deal with adverse behaviors

- Cigarette smoking
- Deficient physical activity
- Deficient dietary plan
- Deficient weight maintenance or reduction

SOURCE:
(1) Mosca L, Benjamin EJ, Berra K, Bezanson JL, Dolor RJ, Lloyd-Jones DM, Newby LK, Piña IL, Roger VL, Shaw LJ, Zhao D, Beckie TM, Bushnell C, D'Armiento J, Kris-Etherton PM, Fang J, Ganiats TG, Gomes AS, Gracia CR, Haan CR, Jackson EA, Judelson DR, Kelepouris E, Lavie CJ, Moore A, Nussmeier NA, Ofili E, Oparil S, Ouyang P, Pinn VW, Sherif K, Smith SC, Sopko G, Chandra-Strobos N, Urbina EM, Vaccarino V, Wenger NK. (2011). Effectiveness-based guidelines for the prevention of cardiovascular disease in women—2011 Update: A Guideline From the American Heart Association. *Circulation*, 123, 1243-1262.

Provider Obstacles

- I doubt this patient can change
- I don't believe a lifestyle change will be enough to really impact my patient's health
- I don't have the time to become a change agent for my patient
- I don't have the training to help my patient change her behavior
- I don't get reimbursed for providing counseling to patients

Patient Obstacles

Ambivalence

- Feeling two ways about something is a normal, non-pathological state
- Being stuck in ambivalence causes a problem to intensify and persist
- Exploring ambivalence means working at the heart of the problem

The "5-A's": Counseling Framework for Change

- Assess (or Ask)
- Advise
- Agree
- Assist
- Arrange

SOURCE:
(1) Whitlock EP, et al. (2003). The primary prevention of heart disease in women through health behavior change promotion in primary care. *Women's Health Issues*, 13, 122-141.

The "5-A's": Assess

- Assess (or Ask about) risk factors, beliefs, behavior, and knowledge about a lifestyle intervention
    - Assess whether she is willing to initiate steps towards modifying her behavior in the direction of the *Heart Truth* objectives
    - Assess knowledge, skills, confidence, conviction, supports, and barriers
    - Provide feedback to her about assessment
- Assess importance with good questions.
    - "How important do you think it is to change this [targeted] behavior?"
    - "On a scale of '1 to 10' with '1' being 'not convinced at all' to '10' being 'totally convinced', how important is it to you?"
    - "What makes you say '3', why not '0'?"
    - "What would it take to move it to a '6'?"

- Assess what or who is important
    - "What or Who is important or of value to you?"
    - "What would they do without you or what would they do if you became disabled from a complication of heart disease?"
    - Use the answer to these questions as leverage in your dialogue about the importance of changing targeted behavior

SOURCE:
(1) Whitlock EP, et al. (2003). The primary prevention of heart disease in women through health behavior change promotion in primary care. *Women's Health Issues*, 13, 122-141.

The "5-A's": Advise

- Advise with a clear, simple & personalized message
    - Expound on the dangers that are specific to her in relationship to the targeted behavior
    - Advise her about the benefits of change
    - Make the source of your advice clear (medical knowledge or from similar patients)
    - Provide advice at a patient-determined level of comprehension
    - Try not to overload her with information in one session
    - "Can you review for me what we just discussed so I know that I made it understandable?"

SOURCE:
(1) Whitlock EP, et al. (2003). The primary prevention of heart disease in women through health behavior change promotion in primary care. *Women's Health Issues*, 13, 122-141.

The "5-A's": Agree

- Agree on goals and plans
    - Goals are something to achieve in 3-6 months
    - Collaboratively select goals based on patient's interest and confidence in her ability to change the targeted behavior
    - Base goals on the patient's priorities
- Plans are specific steps to help achieve goals

SOURCE:
(1) Whitlock EP, et al. (2003). The primary prevention of heart disease in women through health behavior change promotion in primary care. *Women's Health Issues*, 13, 122-141.

The "5-A's": Assist

- Assist with goals and plans
    - Develop a Personal Action Plan that includes:
        - What to do; How to do it; Where to do it
        - What to use; When to do it; How often
        - Barriers to doing it; Plans to overcome barriers
        - Follow-up plan
    - Patient should give herself a confidence rating in achieving the Personal Action Plan
    - The action plan should be re-worked if her level of confidence is lower than 7 on a scale of 1 to 10
    - Make certain that she has appropriate expectations
    - Early on, help her pick some easily achievable goals ("the low hanging fruit") to help build confidence to tackle greater goals

SOURCE:

(1) Whitlock EP, et al. (2003). The primary prevention of heart disease in women through health behavior change promotion in primary care. *Women's Health Issues*, 13, 122-141.

- Assist in problem solving with Personal Action Plan.
    - Identify problem
    - List all possible solutions (brainstorm)
    - Pick one
    - Try it for 2 weeks
    - If it doesn't work, try another
    - If that doesn't work, find a resource for ideas
    - If that doesn't work, accept that the problem may not be solvable now
    - Move on (but come back later)
- Assist in changing behavior
    - Provide self-help and counseling pathways to aid patient in achieving agreed upon goals
    - Aid the patient in acquiring skills, confidence, and social/environmental supports
    - Women tend to respond best to intensive interventions between the provider and the patient
    - Women tend to respond, more so than men, to support groups
- Assist with resources
    - Match resources (community, literature, groups) with patient preferences
    - Utilize outreach and community opportunities whenever feasible

SOURCE:
(1) Whitlock EP, et al. (2003). The primary prevention of heart disease in women through health behavior change promotion in primary care. *Women's Health Issues*, 13, 122-141.

The "5-A's": Arrange

- Arrange follow-up
    - Schedule follow-up visits or contacts for purpose of providing ongoing assistance and support
    - Try a variety of follow-up methods when feasible (in person, phone, email, groups)
    - Making sure follow-up happens will build patient trust in the agreed-upon clinical pathway
    - Adjust the plan as needed during follow-up visits or contacts, including referral elsewhere for more intensive intervention

SOURCE:
(1) Whitlock EP, et al. (2003). The primary prevention of heart disease in women through health behavior change promotion in primary care. *Women's Health Issues*, 13, 122-141.

Stages of Change Model by Prochaska & DiClemente

- Pre-contemplation
- Contemplation
- Preparation
- Action
- Maintenance
- Transformation

SOURCE:

(1) Prochaska JO, DiClemente CC, Norcross JC. (1992). In search of how people change: Applications to addictive behavior. *American Psychologist*, 47, 1102-1114.

Stages of Change: Pre-contemplation

- She is not ready to change
- She is not thinking about change
- She may be resigned to not changing
- She expresses feeling of 'no control'
- She exhibits denial or believes consequences are not serious

Stages of Change: Contemplation

- She is thinking about changing
- She is weighing the relative benefits and costs of the her current behavior and those of the proposed change

Stages of Change: Preparation

- She has begun experimenting with small changes
- She is getting ready to make a move towards behavioral modification
- She is establishing a goal or at least thinking about it

Stages of Change: Action

- She has started her journey towards Transformation by applying herself to her definitive Personal Action Plan designed to facilitate behavioral modification

Stages of Change: Maintenance

- She is maintaining new behavior continuously over an extended period of time (>180 days) to accomplish the overall goal

Stages of Change: Relapse

- 'The Ups & Downs' is a normal part of the process of change
- She may regress to the beginning stages of the Change Model
- She may feel demoralized or disappointed (which often occurs) by set back
- Sometimes original goals are set too high or low or aggressive

Stages of Change: Transformation

- She feels self-assured and feels that only time separates her from her ultimate goal (if not already reached)
- Transformed patients are often willing to and capable of being role models for other patients with similar clinical issues

Stages of Change

- The provider should be able to determine which stage of change the patient is in with respect to the targeted behavioral concern.
- Applying the 5-A's at each stage of change process affords the provider a monitor in guiding and motivating the patient along her trip to 'Transformation'

SOURCE:

(1) Prochaska JO, DiClemente CC, Norcross JC. (1992). In search of how people change: Applications to addictive behavior. *American Psychologist*, 47, 1102-1114.

Change Talk

- Self-motivational statements
- The patient argues for change
- People are more likely to believe and act on what **they** say as opposed to what **we** say
- The physician facilitates the expression of change talk

Types of Change Talk

- I want to change
- I can change
- I have good reasons to change
- I need to change
- I will change
- I see this as a problem
- I am responsible for this problem
- I am taking steps toward change

The Heart Truth Professional Education Campaign Website
www.womenshealth.gov/heart-truth

Million Hearts Campaign Website
millionhearts.hhs.gov
"Get involved and share your commitment to help prevent 1 million heart attacks and strokes in the next five years."

Additional Reading:

- Rollnick S, Mason P, Butler C. Health Behavior Change: A Guide for Practitioners. Edinburgh, Scotland: Churchill Livingstone; 2003.
- Miller WR, Rollnick S. Motivational Interviewing. 2nd ed. New York, NY: Guilford Press; 2002.
- Vermiere E, Hearnshaw H, Van Royen P, Denekens J. (2002). Patient adherence to treatment: three decades of research. A comprehensive review. *Journal of Clinical Pharmacy and Therapeutics*, 26, 331–342.
- Miller NH, Hill M, Kottke T, Ockene I. (1997). The multilevel compliance challenge: Recommendations for a call to action. *Circulation*, 95, 1085-1090.
- Berger B. Motivational interviewing helps patients confront change. Available at: http://www.uspharmacist.com/oldformat.asp?url=newlook/files/Phar/nov99relationships.cfm&pub_id=8&article_id=450. Accessed January 13, 2004.