Health Promotion and Behavioral Change

Virginia C. Li Ph.D.
Professor of Community Health Sciences
Health Promotion (Green)

The combination of educational and environmental supports for actions and conditions conducive to health
An Ecological View on Health Promotion

• Intrapsychological factors
• Interpersonal processes
• Institutional factors
• Community factors
• Public policy
Health Promotion in Community

Health promotion actions means:
• -create supportive environment
• -strengthen community action
• -develop personal skills
• -reorient health services
• -build healthy public policy
Health Education

Any combination of learning experiences designed to facilitate voluntary actions conducive to health
Principles of Health Education

- principle of educational diagnosis
- hierarchical principle
- principle of cumulative learning
- principle of participation
- principle of situation specificity
- principle of multiple methods
- principle of individualization
- Feedback principle
- principle of intermediate target
HEALTH BEHAVIOR

• Any action taken to prevent illness or to detect it at an asymptomatic stage.

• Wellness Behavior: Enhances health/stay well

• Preventive Behavior: Prevents/detects illness

• At-Risk Behavior: Creates risk for illness

• Health-related Social Action: Collective solutions for risk reduction
<table>
<thead>
<tr>
<th>Indirect Risk PHB PHB</th>
<th>Direct Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical checkups</td>
<td>-Pedestrian behavior</td>
</tr>
<tr>
<td>Dental care</td>
<td>-Driving behavior</td>
</tr>
<tr>
<td>Immunization</td>
<td>-Hygiene behavior</td>
</tr>
<tr>
<td>Screening behavior</td>
<td>-Smoking</td>
</tr>
</tbody>
</table>
ILLNESS BEHAVIOR

• Any action taken in the presence of symptoms, to define the state of health and to discover suitable treatment.

• Consultation with lay persons

• Help-seeking behavior
Environmental influences on Health and Illness Behavior

- Competition/regulations
- Resource dependence
- Medical technology
- Population Changes
- Sources of payment
- Cost of medical care
- Ethics in human services
Behavioral Indicators:

- Compliance
- Consumption patterns
- Coping
- Preventive actions
- Self-care
- Utilization

Dimensions:

- Frequency
- Persistence
- Promptness
- Quality
- Range
## Principles of Health Education Applied to Sexual Behavior in AIDS Control and Prevention

<table>
<thead>
<tr>
<th>Behavior Dimension</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and promptness of the behavior</td>
<td>Use condom when sexual intercourse with multiple partners</td>
</tr>
<tr>
<td>Frequency of behavior</td>
<td>Use condom every time having</td>
</tr>
<tr>
<td>Quality of behavior</td>
<td>Check condom to make certain no leakage, Use condom correctly</td>
</tr>
<tr>
<td>Range of health behavior</td>
<td>Having monogamous relationship, Use condom, Avoid having multiple partners, Abstinence</td>
</tr>
</tbody>
</table>
GENERAL PRINCIPLES IN CREATING HEALTH BEHAVIOR

• 1. Information dissemination ===> Change awareness for
  (Media/teaching) behavior change

• 2. Community/Institutional/ Change norms for
  Organization (Training) behavior change

• 3. Environmental or policy Change opportunity
  access change
HEALTH PROMOTION

• What strategies are appropriate theoretically and practically to:
  • a. discourage risky behaviors in populations at risk?
  • b. encourage heathy behaviors in populations at risk?
  • c. assure healthy social and physical environments?
  • d. evaluate that we have had an impact?
THE ANTI-SMOKING CAMPAIGN

- Clear-cut epidemiological evidence
  (Risk perceptions)
- 2. Creation of awareness
  (Media campaign--Health beliefs)
- 3. Change behavioral norms
  (Intensive education of at-risk groups: Soc. Learning Theory, Locus of Control)
- 4. Help people change
  (Smoking cessation/support groups: Learning, BH Modification)
- 5. Create a villain
  (Tobacco industry: Media advocacy, Causal attribution)
- 6. Change access to product
  (Taxes, disincentives: Structural)
- 7. Change the rules
  (Disincentives: anti-smoking policies)
The Case of Tobacco Control

- Proposition 99 - building alliance for tobacco control
- Types of Smoking Control Programs
  - Worksite Control Programs
  - Worksite Control Policies
  - School Based Control Programs
  - Community Based Control Programs
  - Physician/Clinic Based Control Programs
  - Policy-Based Smoking Programs
  - Economic-Based Smoking Programs
- Policy and Environmental Interventions
  - Clean indoor air
  - Restricting tobacco advertising and promotion
  - Restricting use access to tobacco
  - Comprehensive school health programs
  - Price/excise taxes
- Additional interventions
  - Insurance premium differentials
  - Reimbursement for smoking cessation
  - Differential hiring of smokers
  - Litigation as policy
Figure 1

Decision Making Framework for the Delivery of Physician Messages

1. Acknowledge Client’s Smoking Behavior
2. Acknowledge your concern about smoking and your intention to talk to the client today about her smoking
3. Find out what the client knows about the benefits of quitting smoking
   - Knows
     - Confirm/reinforce what she knows.
     - Tell her the benefits of quitting
   - Does not know
     - Tell her the benefits of quitting
4. Find out what the client knows about the risks of smoking
   - Knows
     - Confirm/reinforce what she knows.
     - Tell her about the risks of smoking.
   - Does not know
     - Tell her about the risks of smoking.
5. Determine the client’s willingness to quit
   - Willing
     - Reinforce/encourage her.
   - Unwilling
     - Ask her to state her reasons for her unwillingness to quit.
     - Counter the arguments she raises.
6. Provide guidelines for effective quitting method
7. Ask about social supports for smoking and quitting
8. Seek a commitment from the client
   - Willing to quit
     - To set a target date
     - To talk to others about quitting
     - To read the pamphlet
     - Introduce the self-help guide
   - Ambivalent about quitting
     - To talk to others about quitting with her
     - To read the pamphlet
   - Unwilling to quit
     - To think about quitting
     - To make a decision to read the pamphlet
9. Reinforce the commitments (summary/prescriptions)
FIGURE 1—A Health Education Model* of the Chinese Family Planning Program

- Predisposing Factors:
  - Women's emancipation
  - Ethics of the Socialist Man
  - Reward system
  - Guarantee of security for old age
  - Reduction of infant mortality

- Enabling Factors:
  - State—provincial—local
  - Family Planning Commission
  - Contraceptive supply & pharmaceuticals
  - Free family planning services
  - Deployment of personnel
  - Grassroot participation
  - Mandatory "study session"
  - Neighborhood clinics & home services

- Reinforcing Factors:
  - Training & continuing education of: medical and paramedical personnel
  - Grassroot workers

- Behavior Problems:
  - Family planning adoption and continuation

- Health Problems:
  - MCH

- Non-behavioral factors:
  - Economics
  - National resources

- Social Problems:
  - Population control
  - Productivity
  - Development
  - Consumption

AJPH May, 1976, Vol. 66, No. 5
Issues on Compliance

Compliance
• Overview of Problem: KAP, Social Influence, Coercion
• Measurement

Doctor-Patient Interaction
• Cognitive & information processing (Philips)
• Study of surgical patients (Egbert)
• Training patients to ask question of their doctors (Rotor)
RETENTION CURVE
K-AGP GAP

Knowledge

Attitude

Practice

Time
ELEMENTS OF THE HEALTH BELIEF MODEL

- Perceived Threat
  - Perceived seriousness of illness
  - Perceived susceptibility of illness
- Outcome Expectations
  - Barriers to health behavior
  - Costs/benefits of health behavior
- Efficacy Expectations
  - Ability to carry out the action
- Cues to Action
Health Belief Model

Constraints

- Validity of belief-behavior relationship
- Hard to modify beliefs
- Need to look at interpersonal AND environmental
- Works less well for chronic or habitual behaviors (learning curves, strategies)
- Lack of quantification
- Potential for blaming the victim
Social Learning Theory (Bandura)

- **MODEL OF SELF-EFFICACY**
  - Cognitions--------->Behaviors--------->Outcomes
  - Self-Efficacy Outcome Expectations
- **Outcome Expectations**
  - The expectation that certain actions will lead to a desired outcome.
- **Efficacy Expectations**
  - The expectation that the individual can perform the behavior or complete the task.
- **Self Efficacy** information derives from four sources:
  - Performance attainments (personal mastery of experience)
  - Vicarious experience (observation of successful or unsuccessful experience of others)
  - Verbal persuasion (exhortations)
  - Physiological state (particularly anxiety or success in eliminating negative affects)

**Examples**

- **Environment and Situation**  
  Clinician involvement in the program’s activities;  
  Training clinicians in health education and Counseling for AIDS testing

- **Behavior capabilities**  
  Managing emotional arousal  
  Able to demonstration condom use

- **Expectancies**  
  Doctor-patient communication during routine care

- **Self control**  
  Goal setting exercises to increase voluntary AIDS testing and condom use

- **Observational learning**  
  Pictorial role models in AIDS testing  
  acceptance in feeling good using condom, and in monogamous relationship  
  Using condom correctly

- **Reinforcement**  
  Provide free condom

- **Reciprocal determinism**  
  Targeting a high risk population in a doctor-patient context through personal skill development and a supportive environment

- **Continuing interaction** between a person, the behavior of that person, and the environment within which the behavior is performed
ISSUES IN LOOKING AT HEALTH BEHAVIOR THEORIES

Context:
--Effects beyond the individual’s control
--Measurement of these?

Attitude/Belief/Behavior
• --Correlations?
• --Causal relationships?
• Measurement of this awareness:
• --Accuracy in reporting
• --Attitudes
• --Values
• --Intentions
• --Behaviors
• Need for Observation
THE PRECEDE* MODEL

**Phase 6**
Administrative Diagnosis

**Phases 4–5**
Educational Diagnosis

- Predisposing Factors:
  - Knowledge
  - Attitudes
  - Values
  - Perceptions

**Phase 3**
Behavioral Diagnosis

**Phases 1–2**
Epidemiological and Social Diagnoses

- Nonhealth Factors

**Quality of Life**
Subjectively defined problems of individuals or communities

- Vital Indicators:
  - Morbidity
  - Mortality
  - Fertility
  - Disability

- Dimensions:
  - Incidence
  - Prevalence
  - Distribution
  - Intensity
  - Duration

**Nonbehavioral Causes**

**Behavioral Causes**

**Behavioral Indicators:**
- Utilization
- Preventive actions
- Consumption patterns
- Compliance
- Self-care

**Reinforcing Factors:**
- Attitudes and behavior of health and other personnel, peers, parents, employers, etc.

**Health Education Components of Health Program**

Direct communication: public; patients

Training: community organization

Indirect communication: staff development, training, supervision, consultation, feedback
Organizational Change as the Target For Health Promotion

- Important economic and social resources
- Transmitters of social norms and values
- Mediating structure between individual and larger political and economic environment
Precede
--predisposing, reinforcing, and enabling constructs in educational (and environmental) diagnoses and evaluation

Proceed
--policy, regulatory, and organizational constructs in educational and environmental development