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AEM



# Conceptual Models of Health Behavior

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# Theme

- What conceptual models of health behavior change are most relevant to studying public health-related issues in the ED setting?

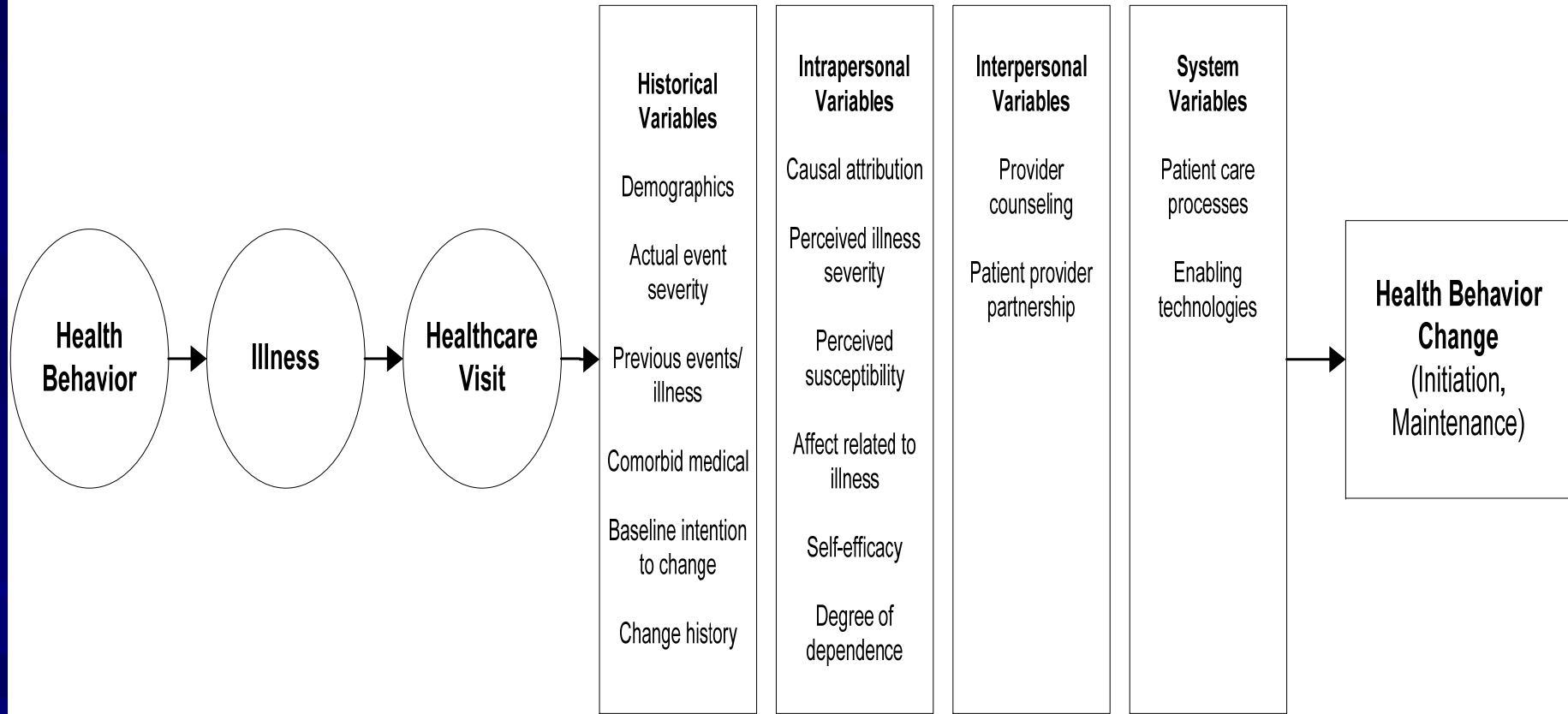
# Definition of Conceptual Model

- Any formal attempt to explain the initiation, maintenance, and change in health behaviors.
- Could be:
  - Formal, existing theories (e.g., Health Belief Model)
  - Specific theoretical constructs (e.g., illness perception)
  - Blends of different models (e.g., McBride & Emmons, 1993)

# Resources

- Glantz K. Theories at a glance: A guide for health promotion practice.
  - <http://www.cancer.gov/PDF/481f5d53-63df-41bc-bfaf-5aa48ee1da4d/TAAG3.pdf>
- McBride CM, Emmons KM, Lipkus IM. Understanding the potential of teachable moments: the case of smoking cessation. Health Educ Res. 2003; 18(2): 156-170.

**Figure One: Model of an Acute Health Event and Health Behavior Change**



# Formal Theories: Individual/Intrapersonal Level

## ■ Self-regulation Theory (AKA, Common Sense Model)

- Leventhal H, Nerenz D, Steele D. Illness representations and coping with health threats. In: Baum A, Reverson T, Singer J, eds. Handbook of psychology and health. Vol IV. Hillsdale NJ: Erlbaum; 1984:219-252.
- Leventhal HL, EA; Cameron, L. Handbook of health psychology. Mahway, NJ: Lawrence Erlbaum; 2001.

## ■ Health Belief Model

- Becker, M.H. The Health Belief Model and Personal Health Behavior. Health Education Monographs. Vol. 2 No. 4.
- Becker, M.H., Radius, S.M., & Rosenstock, I.M. (1978). Compliance with a medical regimen for asthma: a test of the health belief model, Public Health Reports, 93, 268-77.
- Rosenstock I. Historical origins of the health belief model. Health Education Monographs. 1974; 2:328-335.
- Rosenstock IM, Strecher VJ, Becker MH. Social Learning Theory and the Health Belief Model. Health Education Quarterly 15(2):175–183, 1988.

# Formal Theories: Individual/Intrapersonal Level (Cont)

## ■ Transtheoretical Model

- Prochaska JO, DiClemente CC. Stages and processes of self-change of smoking: toward an integrative model of change. *J Consult Clin Psychol.* Jun 1983; 51(3): 390-395.
- Prochaska JO, Velicer WF. The transtheoretical model of health behavior change. *Am J Health Promot.* Sep-Oct 1997; 12(1): 38-48.

## ■ Theory of Planned Behavior (AKA, Theory of Reasoned Action)

- Ajzen I. From intentions to actions: A theory of planned behavior. In: J K, J B, eds. *Action-control: From cognition to behavior.* Heidelberg, Germany: Springer; 1985:11-31.
- Armitage, C.J., & Conner, M. (2000). Efficacy of the theory of planned behavior: a meta-analytic review. *British Journal of Social Psychology*, 40, 471–499.

## ■ Precaution-Adoption Process Model

- Weinstein, ND. The precaution adoption process. *Health Psychol.* 1988; 7: 355-386.
- Weinstein, ND. Perceived probability, perceived severity, and health-protective behavior. *Health Psychol.* 2000; 19(1): 65-74.

# Formal Theories: Interpersonal level

## ■ Social Cognitive Theory

- Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura A. *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, N.J.: Prentice-Hall, 1986.

# Formal Theories: Community Level

- Community Organization and Other Participatory Models
  - Nichter M. Project community diagnosis: Participatory research as a first step toward community involvement in primary health care in Hahn RA (ed.), *Anthropology in public health: Bridging the differences in culture and society*. New York, N.Y.: Oxford University Press, 1999.

# Formal Theories: Community Level (Cont)

## ■ Diffusion of Innovations

- Rogers EM. Diffusion of Innovations (4th Edition). New York, N.Y.: Free Press, 1995.

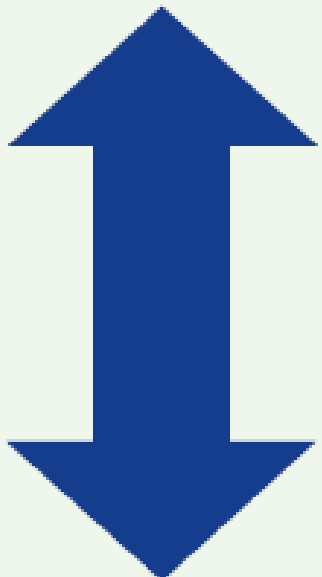
## ■ Communication Theory

- Bernhardt JM. Communication at the Core of Public Health. American Journal of Public Health 94(12): 2051–2052, December 2004.

**Table 11. Summary of Theories: Focus and Key Concepts**

	<i>Theory</i>	<i>Focus</i>	<i>Key Concepts</i>
<b>Individual Level</b>	Health Belief Model	Individuals' perceptions of the threat posed by a health problem, the benefits of avoiding the threat, and factors influencing the decision to act	Perceived susceptibility Perceived severity Perceived benefits Perceived barriers Cues to action Self-efficacy
	Stages of Change Model	Individuals' motivation and readiness to change a problem behavior	Precontemplation Contemplation Decision Action Maintenance
	Theory of Planned Behavior	Individuals' attitudes toward a behavior, perceptions of norms, and beliefs about the ease or difficulty of changing	Behavioral intention Attitude Subjective norm Perceived behavioral control
	Precaution Adoption Process Model	Individuals' journey from lack of awareness to action and maintenance	Unaware of issue Unengaged by issue Deciding about acting Deciding not to act Deciding to act Acting Maintenance

<p><b>Interpersonal Level</b></p>	<p>Social Cognitive Theory</p>	<p>Personal factors, environmental factors, and human behavior exert influence on each other</p>	<p>Reciprocal determinism Behavioral capability Expectations Self-efficacy Observational learning Reinforcements</p>
<p><b>Community Level</b></p>	<p>Community Organization</p>	<p>Community-driven approaches to assessing and solving health and social problems</p>	<p>Empowerment Community capacity Participation Relevance Issue selection Critical consciousness</p>
	<p>Diffusion of Innovations</p>	<p>How new ideas, products, and practices spread within a society or from one society to another</p>	<p>Relative advantage Compatibility Complexity Triability Observability</p>
	<p>Communication Theory</p>	<p>How different types of communication affect health behavior</p>	<p>Example: <u>Agenda Setting</u> Media agenda setting Public agenda setting Policy agenda setting Problem identification, definition Framing</p>

**Figure 10.****Using Theory to Plan Multilevel Interventions**

<i>Change Strategies</i>	<i>Examples of Strategies</i>	<i>Ecological Level</i>	<i>Useful Theories</i>
<b>Change People's Behavior</b>	<ul style="list-style-type: none"><li>• Educational sessions</li><li>• Interactive kiosks</li><li>• Print brochures</li><li>• Social marketing campaigns</li></ul>	Individual	Stages of Change Precaution Adoption Process Health Belief Model Theory of Planned Behavior
	<ul style="list-style-type: none"><li>• Mentoring programs</li><li>• Lay health advising</li></ul>	Interpersonal	Social Cognitive Theory
<b>Change the Environment</b>	<ul style="list-style-type: none"><li>• Media advocacy campaigns</li><li>• Advocating changes to company policy</li></ul>	Community	Communication Theory Diffusion of Innovations Community Organizing

# Recommendation 1

- Existing health behavior theories should be adapted for the ED setting in a time and cost-conscious manner, with consideration of the context of the patient (chronic vs. acute factors; initiation of behavior change vs. maintenance of behavior change).

# Research 1 (Examples)

- Who should we target?
- What are the intrapersonal/individual factors that are most predictive of behavior change after an ED visit?
- What are the interpersonal factors that are most predictive of behavior change after an ED visit?

# Recommendation 2

- *Health behavior theories applied to the ED setting should try to incorporate both cognitive and affective components.*

# Research 2 (Examples)

- What are the cognitive and affective responses to an acute health event?
- Do cognitive and affective responses to an acute health event differ based on the chronicity of the underlying illness?
- What is the relationship between the underlying reason for the ED visit and effectiveness of a health behavior intervention?
- Does an intervention designed to heighten perceived illness severity **and** event-related fear (i.e., health scare) lead to greater behavior change initiation than an intervention targeting each domain alone?

# Recommendation 3

- *When a public health intervention for the ED is being designed and studied, it should be firmly rooted in a theoretical model or conceptual framework of health behavior. This model or framework can be well-established or novel and may use combinations of existing models. The link between the theory and the intervention should be made explicit through testable predictions and data analytic approaches (e.g., mediation, moderation, structural models).*

# Research 3 (Examples)

- Crosswalk SBIRT interventions of various behaviors (smoking, alcohol, risky behaviors) to stages of awareness of health risk and willingness to change in various models of health behavioral theory among ED patients to identify barriers and assess opportunities for success.
- Does one size fit all?

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