

Behavioral Change Models

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Introduction

- Health promotion is a multi-disciplinary field that aims to 1) prevent disease and death, 2) promote a better quality of life, and 3) create environmental conditions in which people can be healthy by intervening at the institutional, community, and societal level.
- Whether health promotion practitioners can achieve this mission depends upon their ability to accurately identify and define health problems, assess the fundamental causes of these problems, determine populations most at-risk, develop and implement theory- and evidence-based interventions, and evaluate and refine those interventions to ensure that they are achieving their desired outcomes without unwanted negative consequences.
- To be effective in these endeavors, health promotion practitioners must know how to apply the basic principles, theories, research findings, and methods of the social and behavioral sciences to inform their efforts. A thorough understanding of theories used in public health, which are mainly derived from the social and behavioral sciences, allow practitioners to:
 - Assess the fundamental causes of health promotion problem, and
 - Develop interventions to address those problems.

Learning Objectives

After successfully reviewing these lectures, students will be able to:

- List and describe the key constructs of the **Health Belief Model** and the theory of planned behavior and explain how they might be applied to develop effective health promotion interventions
- List and describe the elements of "**perceived behavioral control**"
- Describe the underlying theory and basic elements of **Social Norms Theory** and marketing campaigns
- List and describe the key constructs of **Social Cognitive Theory** and explain how they might be applied to develop effective public health interventions
- Summarize the criticisms that have been made regarding the major **traditional models of health behavior** change and why these models do not seem adequate to account for observed health behaviors
- Outline the major steps in the **Transtheoretical Model**
- List the characteristics of each step of the **Transtheoretical Model**
- Describe **Diffusion of Innovation Theory** and how it can be applied in health promotion

The Health Belief Model

- The Health Belief Model (HBM) was developed in the early 1950s by social scientists at the U.S. Public Health Service in order to understand the failure of people to adopt disease prevention strategies or screening tests for the early detection of disease. Later uses of HBM were for patients' responses to symptoms and compliance with medical treatments. The HBM suggests that a person's belief in a personal threat of an illness or disease together with a person's belief in the effectiveness of the recommended health behavior or action will predict the likelihood the person will adopt the behavior.

- The HBM derives from psychological and behavioral theory with the foundation that the two components of health-related behavior are 1) the desire to avoid illness, or conversely get well if already ill; and, 2) the belief that a specific health action will prevent, or cure, illness. Ultimately, an individual's course of action often depends on the person's perceptions of the benefits and barriers related to health behavior. There are six constructs of the HBM. The first four constructs were developed as the original tenets of the HBM. The last two were added as research about the HBM evolved.

1. Perceived susceptibility - This refers to a person's subjective perception of the risk of acquiring an illness or disease. There is wide variation in a person's feelings of personal vulnerability to an illness or disease.
2. Perceived severity - This refers to a person's feelings on the seriousness of contracting an illness or disease (or leaving the illness or disease untreated). There is wide variation in a person's feelings of severity, and often a person considers the medical consequences (e.g., death, disability) and social consequences (e.g., family life, social relationships) when evaluating the severity.

3. Perceived benefits - This refers to a person's perception of the effectiveness of various actions available to reduce the threat of illness or disease (or to cure illness or disease). The course of action a person takes in preventing (or curing) illness or disease relies on consideration and evaluation of both perceived susceptibility and perceived benefit, such that the person would accept the recommended health action if it was perceived as beneficial.

4. Perceived barriers - This refers to a person's feelings on the obstacles to performing a recommended health action. There is wide variation in a person's feelings of barriers, or impediments, which lead to a cost/benefit analysis. The person weighs the effectiveness of the actions against the perceptions that it may be expensive, dangerous (e.g., side effects), unpleasant (e.g., painful), time-consuming, or inconvenient.

5. Cue to action - This is the stimulus needed to trigger the decision-making process to accept a recommended health action. These cues can be internal (e.g., chest pains, wheezing, etc.) or external (e.g., advice from others, illness of family member, newspaper article, etc.).

6. Self-efficacy - This refers to the level of a person's confidence in his or her ability to successfully perform a behavior. This construct was added to the model most recently in mid-1980. Self-efficacy is a construct in many behavioral theories as it directly relates to whether a person performs the desired behavior.

Limitations of Health Belief Model

There are several limitations of the HBM which limit its utility in health promotion. Limitations of the model include the following:

- It does not account for a person's attitudes, beliefs, or other individual determinants that dictate a person's acceptance of a health behavior.
- It does not take into account behaviors that are habitual and thus may inform the decision-making process to accept a recommended action (e.g., smoking).
- It does not take into account behaviors that are performed for non-health related reasons such as social acceptability.

- It does not account for environmental or economic factors that may prohibit or promote the recommended action.
- It assumes that everyone has access to equal amounts of information on the illness or disease.
- It assumes that cues to action are widely prevalent in encouraging people to act and that "health" actions are the main goal in the decision-making process.

Summary

- The HBM is more descriptive than explanatory, and does not suggest a strategy for changing health-related actions. In preventive health behaviors, early studies showed that perceived susceptibility, benefits, and barriers were consistently associated with the desired health behavior; perceived severity was less often associated with the desired health behavior. The individual constructs are useful, depending on the health outcome of interest, but for the most effective use of the model it should be integrated with other models that account for the environmental context and suggest strategies for change.