**Population Assessment 1**

Module 5: Individual System Level Factors

Session 5.1
Behaviors and Behavior Change

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**Lesson 5.1:**

- Interpret the role of behavioral, psychosocial, and environmental factors on the onset of PH issues and prevention efforts through a systems framework
- Examine how behavioral theories and methods are used to assess PH in terms of factors that influence their development and alternative approaches to their resolution.
- Apply basic theories, concepts and models from a range of social and behavioral disciplines that can be used to explain and predict individual system factors

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**Epidemiology = Population Assessment**

The study of the distribution and *determinants* of *death, disease, and disability* in human populations, and the *application of this study* to control health problems

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**Public Health Approach**

<table>
<thead>
<tr>
<th>Public Health Approach</th>
<th>Essential Skills for Population Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Surveillance: What is the problem</td>
<td>1. Assessment</td>
</tr>
<tr>
<td>2. Risk factor identification: What is the cause</td>
<td>2. Determining Cause</td>
</tr>
</tbody>
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**Leading Causes of Death**

United States, 2000

- Heart Disease
- Cancer
- Stroke
- Chronic lower respiratory disease
- Unintentional injuries
- Diabetes
- Pneumonia/influenza
- Alzheimer’s disease
- Kidney disease
- [Graph](#)

**Actual Causes of Death**

United States, 2000

- Tobacco
- Poor diet/Physical inactivity
- Alcohol consumption
- Microbial agents (e.g., influenza, pneumonia)
- Toxic agents (e.g., pollutants, asbestos)
- Motor vehicle
- Fires
- Social behavior
- Illicit drug use

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Types of BEHAVIORS

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventive health</td>
<td>Any behavior undertaken by an individual who believes him/herself to be healthy, for the purpose of preventing or detecting illness in an ASYMPTOMATIC STATE.</td>
<td>Eating 3 vegetables and 2 fruits per day, Wearing a condom during intercourse, Mammogram.</td>
</tr>
<tr>
<td>Illness</td>
<td>Any behavior undertaken by an individual who perceives himself to be ill, to define the state of health, and to discover a suitable remedy.</td>
<td>Getting a mole checked by a dermatologist if it looks symptomatic, Going to the dentist for bleeding gums.</td>
</tr>
<tr>
<td>Sick-role</td>
<td>Any behavior undertaken by an individual who considers him/herself to be ill, for the purpose of getting well. It includes receiving treatment from medical providers.</td>
<td>Staying away from others if contagious, Taking meds as prescribed by health care provider, Yoga for fibromyalgia pain.</td>
</tr>
</tbody>
</table>

Conceptualization of behavioral adoption and sustainability
Theories of Behavior Change

How do we determine antecedents and consequences?

A theory is a set of statements and constructs used to explain and predict phenomena.

Theories of Behavior Change

- Health Belief Model
- Transtheoretical Model
- Theory of Planned Behavior
- Social Cognitive Theory
- Social Support Theory
- Social Network Theory

Transtheoretical Model

TTM Construct 1: Stages of Change

Pre-contemplation
- Fence
- No, Despair
- Maybe, Ambivalence
- Yes, Let’s Go
- Motivated
- Doing It
- Living It
- Start, Over Ugly!

Contemplation
- “Fall from grace”
- Relapse
- “Ignorance is bliss”
- “Fence sitting”
- Maintenance
- “steady as she goes”

Preparation
- “testing the waters”
- Action
- “go for it!”
TTM Construct 2: Process of Change

TTM Constructs 3 & 4: Decisional Balance and Self Efficacy

Theories of Behavior Change
Health Belief Model

HBM Constructs: Six described below

<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Sensitivity</td>
<td>One's opinion of chances of getting a condition</td>
<td>Define population(s) at risk, risk levels, personalize risk based on a person's features or behavior; heighten perceived susceptibility if too low</td>
</tr>
<tr>
<td>Perceived Severity</td>
<td>One's opinion of how serious a condition is and what its consequences are</td>
<td>Specify consequences of the risk and the condition</td>
</tr>
<tr>
<td>Perceived Benefits</td>
<td>One's belief in the efficacy of the advised action to reduce risk or seriousness of impact</td>
<td>Define action to take, how, when, where; clarify the positive effects to be expected.</td>
</tr>
<tr>
<td>Perceived Barriers</td>
<td>One's opinion of the tangible and psychological costs of the advised action</td>
<td>Identify and reduce barriers through reassurance, incentives, assistance.</td>
</tr>
<tr>
<td>Cues to Action</td>
<td>Strategies to activate “readiness”</td>
<td>Provide how to information, promotes awareness, reminders.</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>Confidence in one's ability to take action</td>
<td>Provide training, guidance in performing action.</td>
</tr>
</tbody>
</table>
Lesson 1: Pre-Class Activity
1. Watch video of BJ Fogg discussing state of the art strategies for behavior change (next slide).
2. Print the Behavior Grid and Fogg Behavior Model on slides 27 and 28.
3. Answer the questions on the pre-class assignment (word document in Canvas under pre-class).
4. Submit pre-class by noon the day of class.
5. Enjoy learning about how to change behaviors 😊