Epi 246 Session 1
Introduction to Theories Focused on Individual Health Behavior and Behavior Change
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LEARNING OBJECTIVES. Students will be able to:

1. Understand why health behavior theory is helpful for translating research into practice.

2. Describe a behavior of interest using conceptual frameworks.

3. Apply a theoretical approach to health behavior or health behavior change focusing on individual factors.

4. See how interventions for health behavior change have been informed by theories presented in class.

5. Identify how individual behavior change processes fit into larger socio-ecological frameworks for creating conceptual frameworks and for developing interventions for achieving health outcomes.

STRONGLY Recommended Reading List

Lecture Reading:

1. Theory at a Glance. pp 1-18

2. Bartholomew K and Mullen P. Five roles for using theory and evidence in the design and testing of behavior change interventions. Journal of Public Health Dentistry. (2011) S20–S33

Case Studies

Foy R, Walker A, Ramsay C, et al. Theory-based identification of barriers to quality improvement: induced abortion care. Intl J Quality in Health Care 2005. 147-155

Shafer A, Cates JR, Diehl SJ, Hartman M. Asking Mom: Research for an HPV Vaccine Campaign Targeting Mothers of Adolescent Girls. J Health Comm. 2011. 1-18.

Zoellner J, Krzeski E, Harden S, Cook E, Allen K, Estabrooks PA.. Qualitative application of the theory of planned behavior to understand beverage consumption behaviors among adults.
J Acad Nutr Diet. 2012 Nov;112(11):1774-84.

Additional Reading (optional):
Health Education and Behavior – Chapters 3,4,5 and 7.

French S, Green S, O'Connor DA et al 2012. Developing theory-informed behavior change interventions to implement evidence into practice- a systematic approach using the Theoretical Domains Framework. Implementation Science 2012. & (38)

Francis J, Tinmouth A, Stanworth et al. Using theories of behavior to understand transfusion prescribing in three clinical contexts in two countries: Development work for an implementation trial. Implementation Sci, 2009. 4:70.1-9

Lawton R, Ashley L, Dawson S, Waiblinger D, Conner M. Employing an extended Theory of Planned Behaviour to predict breastfeeding intention, initiation, and maintenance in White British and South-Asian mothers living in Bradford.Br J Health Psychol. 2012 Nov;17(4):854-71.

Eccles M, Grimshaw J, Walker A, et al. Changing the behavior of healthcare professionals: the use of theory in promoting the uptake of research findings. J Clin Epi, 2005. 107-112.

THEORIES or FRAMEWORKS Introduced

Logic models to describe problems.

Socio-Ecological frameworks for integrating evidence-based clinical & public health strategies

Health Belief Model

Theory of Planned Behavior

HOMEWORK ASSIGNMENT – there are 3 parts to HW 1.

Due THURSDAY OF FOLLOWING WEEK by 5pm. These will be graded immediately.

Part 1

For one of the case studies readings (Foy, Zoellner, or Shafer), please describe the following:

1. How did the authors use theory? Where would you place it on a continuum of uses of theory we discussed?

2. How did it relate to the uses of theory as described by Bartholemew and Mullen?

3. In you view of the work, how much did they explanation of the data 'fit' the theoretical components?

Part 2

Select a behavior that is relevant to your area of interest. Which levels (individual, social, institutional, environmental) are most likely to have a significant role? Who would you engage to develop a formative project to understand more about this behavior? Use the *Worksheet Materials that follow.*

Part 2. Worksheet Materials– Select the target behavior you would like to change

Task 1: Generate a list of candidate target behaviors that could bring about the desired outcome

Task 2a: Prioritize a behavior using the criteria below.

1. How much of an impact changing the behaviour will have on desired outcome
2. How likely it is that the behaviour can be changed (when considering likelihood of change being achieved, think about the capability, opportunity and motivation to change of those performing the behaviour)
3. How likely it is that the behaviour (or group of behaviours) will have a positive or negative impact on other, related behaviours
4. How easy it will be to measure the behaviour

Task 2b: DESCRIBE YOUR SELECTED TARGET BEHAVIOR BELOW

Worksheet 2– Based on the selected behavior, dive into defining it more and placing it in Socio-Ecological context

Task 3: Please complete the table below.

Target behavior	
***Who* needs to perform the behaviour?**	
***What* do they need to do differently to achieve the desired change?**	
***When* do they need to do it?**	
***Where* do they need to do it?**	
***How often* do they need to do it?**	
***With whom* do they need to do it?**	

Task 4. Draw a logic model /diagram of the behavior in its setting, as in Bartholemew and Mullen paper.

Part 3

For one of the behaviors relevant to your outcome, complete a table **relating variables relevant to your behavior to theories presented in class and in the readings**. Can you expand on these individual factors, to include other factors at the social, institutional and environmental levels? An example of a previous HW is presented to serve as a guide from Meg Okumura MD MAS.

For my project which continues to be the cystic fibrosis (CF) health care transitions quality improvement intervention, I am using the health belief model for this exercise because it addresses individual levels of why people do not 'do what they need to'. Specifically I believe the intervention can address behavior in each of these various domains and hopefully we can actually make a difference using a multi-faceted tactic for individualized treatment plans. In the strategies, I attempted to expand the domains to include social, institutional and environmental factors in both the theoretical variables as well as the intervention. In this intervention, I define the social level as family, the institutional level as the clinic and hospital, the 'environment' as the CF community.

Health Belief Model : Domains translated to the cystic fibrosis (CF) intervention addressing key behaviors to be addressed: Poor compliance to treatment regimen (Weight monitoring (BMI status), respiratory treatment and medications)	**Strategies in intervention on individual level. Followed by the social, institutional and environmental factors that may be related to the individual level intervention strategy.**
Perceived Susceptibility • Not aware of current respiratory status or microbiologic profile. • Not aware of importance of maintaining BMI • On a social level, families may not be engaged in the understanding CF. On an institutional level, physicians may not be effective in communicating risk to the patients. On an environmental level, the CF community could be not engaged in policies to ensure knowledge of treatment.	Individual: Review current pulmonary function tests, nutritional status and micro organisms in sputum. Review risks associated with their genotype. In relating to the social/ institution and environment: Inform families and get them involved in learning about their child's BMI and pulmonary status. The clinic can provide information sheets and cues in the chart to ensure monitoring of respiratory status and BMI. The CF foundation could improve dissemination of guidelines in regards to pulmonary status and outcomes.
Perceived Severity • Not aware of the consequences of poor CF care • On a social level, families may not understand the child's illness. On an institutional level, the clinic may not be sharing information about how sick the child is. On an environmental/community level, the CF foundation may not be advertising risk to their community.	Individual: Information about their pulmonary function. Information about long term effects of CF In relating to the social/ institution and environment: Discuss with family about the outcomes of poor CF care. Clinic has operationalized flags to ensure that patients maintain function or alert patients if they are falling off track. Clinic meetings can also discuss at risk youth to target more aggressive treatment and monitoring. The CF foundation can advertise what the outcome of treatment failure is.

Perceived Benefits • Not aware of the benefits of CF treatment • On a social level, families may not be aware of the benefits of doing treatments every day. Clinic may not be emphasizing the potential benefits. The CF foundation may also not be doing advertising the benefits of long term treatment and projected survival.	Individual: Graphs of pulmonary function when healthy versus sick. Discuss increase in survival with compliance In relating to the social/ institution and environment: Families can be instructed as well as the patients on pulmonary function and survival. The clinic can hold family and patient seminars to educate families. CF foundation can list survival and statistics on their website. Special focus can be on pointing out survival on compliant patients, rather than just mortality.
Perceived Barriers • No time to do chest therapy • No time to take enzymes • Costs of medications too high • On a social level, families may not be prioritizing time for the patient. The clinic may not be making treatment regiments easy for the patient. The CF foundation may not be including time management or helping with creating policies to lower medication cost.	Individual: -Calendar to monitor and encourage chest therapy and time management. Discuss ways to incorporate enzymes with meals In relating to the social/ institution and environment: Families could help with setting aside time for treatments. The clinic can try to adjust the regimen to be as simple as possible. The CF foundation can advocate to drug companies to lower costs and also find ways to promote combination drugs to simplify treatment.
Cues to Action • Patient may forget guide • On a social level, families may not find the guide important. On a clinic level, they may not be helping patients to bring guide. On a foundation level, encouraging team efforts may not exist.	Individual: Send reminders to patient In relating to the social/ institution and environment: Families can be encouraged to help patients remember and use the guide at home (give them reminder cards as well). The clinic can incorporate the guide so it becomes a natural part of the clinic visit, including both family as well as patient, not just something handed to patients. The foundation can have publications readily available online for patients for use in education and provide funds to clinics to help with materials.
Self Efficacy • Not sure they can do all their treatments • Patients stating "I'm just lazy" • Social level, families may do everything rather than giving responsibility to the patient/youth. CF clinic may not engage the patient and only the family. The CF foundation may be focusing their efforts too much on parents.	Individual: Set small but small stepwise goals in 'to do list'. Encourage ways to incorporate treatments with daily routine. Find out why patients do not feel motivated. In relating to the social/ institution and environment: Social: Family can be encouraged to give ownership to patients (have patients schedule visit). In the clinic, the instructions and directions be directed at the patient, and ensure to engage patient rather than the family member. On a foundation level, policies to help individual patients navigate their health care, such as local assistance to get insurance and medications