Introduction

Health Behavior Change at the Individual, Household and Community Levels, 224.689
This class

- **Hour 1**: Course introduction, Disciplinary perspectives informing the course
- **Hour 2**: Do we understand each other? Translation problems in behavior change interventions
Hour 1

- Brief history of the course
- This course as part of different academic programs
- What is in a name?
- Disciplines informing the course
- Course modules
- Readings, reading philosophy
- Assignments
Brief history of the course

  - Carl Kendall (Tulane Univ.)
  - Barbara de Zalduondo (UNAIDS)
  - Margaret Bentley (Univ. North Carolina)
  - Anita Shankar (Adjunct faculty JHSPH)

- 1998-2006: Foundations of Behavioral Change Interventions in Developing Countries
  - Michael Sweat (Medical Univ. South Carolina)

- 2007-present: Health Behavior Change at the Individual, Household & Community Levels
Who are you?

- Doctoral students = 18
  - IH, HBS, Mental Health, Clinical Investigation, Epi
- MPH = 55
- MSPH in IH Dept = 45
- MHS in HBS/Social Factors = 12
- Homewood Public Health undergrad = 8
- Other MSPH, MHS and special studies = 5
This course as part of different academic programs

- International Health
  - Social and Behavioral Interventions Program (SBI)
  - Social & Behavioral Sciences Option in GDEC, Health Systems, Human Nutrition
- MPH concentrations
  - Social and Behavioral Sciences (SBS)
  - Global Environmental Sustainability and Health (GESH)
<table>
<thead>
<tr>
<th>TERM</th>
<th>Courses</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>224.689 Health Behavior Change at the Individual, Household &amp; Community Levels, 4 units</td>
<td>Tues-Thur 8:30-10:20</td>
</tr>
<tr>
<td>3</td>
<td>224.690 Qualitative Research Theory &amp; Methods, 5 units (Lab)</td>
<td>Tues-Thur 8:30-10:20</td>
</tr>
<tr>
<td>4</td>
<td>224.691 Qualitative Data Analysis, 5 units (Lab)</td>
<td>Mon-Wed 8:30-10:20</td>
</tr>
<tr>
<td></td>
<td>224.692 Formative Research for Behavioral and Community Interventions, 4 units</td>
<td>Mon 10:30-12 &amp; Fri 8:30-12</td>
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<tr>
<td>TERM</td>
<td>Courses</td>
<td>Separate?</td>
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<tr>
<td>2</td>
<td>224.689 Health Behavior Change at the Individual, Household &amp; Community Levels, 4 units</td>
<td>Separate course</td>
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<tr>
<td>3</td>
<td>224.690 Qualitative Research Theory &amp; Methods, 5 units (Lab)</td>
<td>Combined course, one grade given at end of 4th Term</td>
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</tbody>
</table>
What's in a name?

Health Behavior Change at the Individual, Household and Community Levels
What would I like to call the course?

“Thoughts about how to engage people in reflecting on what they do and how it affects their own health and the health of the planet, and negotiate with them, in an atmosphere of mutual respect, feasible alternative behaviors that they might engage in, without of course putting undue pressure on anybody, and doing this in a wide range of settings including high, middle and low income countries”
What’s in a name?

Health Behavior

Change at the Individual, Household and Community Levels
A concept that is both fundamental but also controversial and somewhat elusive:

- How are behaviors defined, and who defines them?
- Whose behaviors do we focus on?
- Why focus on behavior, rather than access to high-quality services (water, housing, health care etc.)?
  
  • Isn’t this blaming the victim?
What’s in a name?

Health Behavior Change at the Individual, Household and Community Levels
Interventions are what we are all about in public health, but.....

- What gives us the authority to tell someone else to change her or his behavior?
- Do we really understand the context well enough to make recommendations?
- Are we sure what we are recommending is beneficial?
Who needs to change?

High-income

- Unsustainably high consumption of
  - Fossil fuels
  - Soil, water, forests
  - Animals & fish
- Inhumane methods of animal production
- Obesity and chronic disease

Low-income

- Malnutrition
- Infectious diseases
- Population growth
- Low literacy rates
- BUT: More sustainable levels of consumption
What’s in a name?

Health Behavior Change at the Individual, Household, and Community Levels
Individual, Household and Community

- Awareness is growing that we need to intervene on multiple levels to be effective
- Smoking often taken as an example
  - Global level: Framework agreement
  - National and local levels: Laws, policies, taxes etc.
  - Individual level: Knowledge, self-efficacy, refusal skills etc.
Individual, Household and Community

- This course will offer more of an anthropological perspective on individual, household and community.
- Critically examine how each is defined.
- Household and community often left out of behavior change models, they will be a focus in this course.
Assembling your expertise as a behavior change specialist
Assembling your expertise as a behavior change specialist

Expertise in behavior change
Disciplines informing the course

- Some of the disciplines are:
  - Anthropology
  - Sociology
  - Psychology
  - Health education
  - Health communication

- Some contribute more to theory, others more to practice
Disciplines informing the course

- Anthro
- Soc
- Application
- Psych
- Health Comm
- Health Educ

Theory

+ +

- -
“Yeah, I did Psych in undergrad, but now I am doing Public Health”
“ I once took a lot of Anthro courses”
Assembling your expertise as a behavior change specialist

Undergrad & other training

Expertise in behavior change
Assembling your expertise as a behavior change specialist

Undergrad & other training

Professional associations

Expertise in behavior change
Some professional associations

- American Anthropological Association:
  - www.aaanet.org
- Society for Medical Anthropology:
  - www.medanthro.net
- Society for Applied Anthropology:
  - www.sfaa.net
- American Sociological Association:
  - www.asanet.org
- American Psychological Association:
  - www.apa.org
- Society for Public Health Education:
  - www.sophe.org
- American Communication Association:
  - www.americancomm.org
Assembling your expertise as a behavior change specialist

- Undergrad & other training
- Professional associations
- Exposure to other cultures and languages

Expertise in behavior change
Assembling your expertise as a behavior change specialist

- Undergrad & other training
- Professional associations
- Exposure to other cultures and languages

- Expertise in behavior change
- Confusion
Assembling your expertise as a behavior change specialist

- Undergrad & other training
- Professional associations
- Exposure to other cultures and languages
- Reading widely
- Expertise in behavior change
Assembling your expertise as a behavior change specialist

Undergrad & other training

Professional associations

Exposure to other cultures and languages

Expertise in behavior change

Reading widely

This course
Course modules

- Module 1: Culture, health and illness
- Module 2: Health behavior at the individual level
- Module 3: Social networks, diffusion of innovations and social marketing
- Module 4: Households and couples
- Module 5: Community, ecological models and multi-level interventions
Course Readings
Course Readings

- What usually happens around this place:
  - Lots of articles are assigned
  - Students do the readings the first week
  - Things get busy, the professor doesn’t seem to insist on the readings ➔ By Week 3 of the course, few students are reading
Course Readings

- What I think:
  - Reading is essential and serves many purposes
  - One way of integrating past training and work experiences
  - Every student should make an effort to read systematically in this course
Course Readings

Different ways to read:
- Read everything in order
- Skim all the definitions in Wikipedia first, then read the articles
- Skip the required articles and read the optional articles
- Start with the readings at the end of the course that look more interesting
CoursePlus website

- 150 articles posted already
- Impossible to read them all
- Be selective in your reading
  - Past experiences
  - Previous disciplinary training
  - What interests you
Wikipedia

- Sometimes it is great, sometimes not
- On balance, very helpful for this course
- Coverage of disciplines:
  - Psychology: ★ ★ ★ ★ ★
  - Sociology: ★ ★
  - Anthropology: ★
- Psycho, Soc & Anthro each have portals
- Include colon to find Portal ➔ Portal: Psychology
- Psych has comprehensive coverage of topics
- Better for definitions than in-depth discussion
Psychology (Greek: ψυχολογία) is the academic and applied study of behavior, mind, and their underlying mechanisms. It primarily applies to humans but can also be applied to non-humans such as animals or artificial systems. Psychology also refers to the application of such knowledge to various spheres of activity, including problems of human beings' daily lives and the treatment of mental illness. The field contains a range of sub-areas (for instance, the studies of development, personality, and language), as well as many different theoretical orientations (such as behaviorism, evolutionary psychology, and psychoanalysis). Psychology draws from a number of other fields of study, including biology, sociology, anthropology, and philosophy.
Psychology topics: A

Assembling your expertise as a behavior change specialist

- Undergrad & other training
- Professional associations
- Exposure to other cultures and languages
- Expertise in behavior change
- Reading widely
- Work experiences
Discussion groups and assignments
Course evaluation

- No midterm exam
- No final exam
- Grading is based on:
  - **25%**: Online quizzes in CoursePlus due the night before each discussion group
  - **75%**: Written assignments
Quizzes in CoursePlus

- Objective is to encourage you to read the key articles in preparation for each discussion group question
- No trick questions
- It is “open book” ➔ you can look at the articles as you are doing the quiz
- Count for 25% of your final grade
  - 5% for 1st quiz, 4% each for the other 5
Quizzes in CoursePlus

- Quizzes will ask you questions about the **Assigned Reading** for the lab/discussion group
- Quizzes will not have questions about the **Further Reading** listed
**Written assignments**

- **15%** for one Response Paper
- **10%** for final assignment draft
  - Draft of Q1
  - Outline for Q2 and Q3
- **50%** for final assignment
- Articles for final assignment are on CoursePlus now
<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due date</th>
<th>Percent of final grade</th>
<th>Pages (Double-spaced)</th>
<th>Grading process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response paper on discussion 1 &amp; 2 or 1st 2 modules</td>
<td>Thur 10 Nov</td>
<td>15%</td>
<td>5-6</td>
<td>Graded with form in syllabus</td>
</tr>
<tr>
<td>Final assignment: Q1 plus outline for Q2 &amp; Q3</td>
<td>Tues 06 Dec</td>
<td>10%</td>
<td>5-6</td>
<td>Graded with form in syllabus</td>
</tr>
<tr>
<td>Final assignment: Revised Q1 + Q2 &amp; Q3</td>
<td>Wed 21 Dec</td>
<td>50%</td>
<td>10</td>
<td>Graded with form in syllabus</td>
</tr>
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</table>
Six discussion group sessions

- Break out into 5 groups from 9:00-10:20
- Topics:
  - Standards of efficacy
  - Applicability of behavior change models to other cultures
  - HIV/AIDS prevention
  - Intimate partner violence
  - Community-level interventions
  - Behavior of health workers
Response paper

- Object is to get you thinking and reading, learn what we are looking for when grading
- Not necessary to look up additional articles, there are more than enough already on CoursePlus
- Go into more detail on a question of interest that came up during discussion or lecture
- Should clearly describe the issue/concept and a response from your own perspective
Final assignment
Final assignment: Scenarios

- Three scenarios provided
- While these scenarios are the “default scenarios”, students are free to select an alternative scenario. Alternative scenarios should be described in outline for final assignment submitted Dec 06
- Alternative scenarios may be related to the dissertation research topic for doctoral student, capstone project for MPH student, or internship for MSPH student.
Final assignment: Scenarios

- Over-use of antimalarials by health workers in low-transmission setting
  - Tanzania (or other country)
- Micronutrient home fortification in humanitarian relief
  - Damak Refugee Camp, Nepal
  - Dadaab Refugee Camp, Kenya
- Reducing household energy consumption
  - USA or other high or middle-income country
Final Assignment: Looking up additional information

- We provide you with the information you need to do each of the three scenarios.
- We prefer that you invest your time in digesting this information and working with it to complete the assignment.
- We would like you to minimize effort in looking up additional information about malaria, refugees, alternative sources of energy etc.
Challenges in behavior change for Scenario #3

- People unaware of how much energy they consume for different purposes, unaware of ultimate source of the energy
- Energy appears clean, no odor, no obvious harm to the environment taking place
  - Electricity
  - “Natural” gas
- Household consumption of energy seen as insignificant compared to cars, trucks, airplanes, factories
162 pounds: Amount of coal it takes to light a house with incandescent lightbulbs for a month

**1140 pounds**: Total monthly coal consumption for an average US household resulting in 3369 pounds of carbon dioxide emissions

After mountain-top removal in West Virginia

Photo by IdaStewie. http://www.flickr.com/photos/9630469@N05/709958921/. Creative Commons BY-NC-SA.
“improvident”
“improvident”

- “We believe in reclaiming the Natives from improvident habits and in transforming them into ambitious and self-helpful citizens”
This adjective has been deployed by the powerful to justify colonialism, and implement various decisions and policies on behalf of the powerless.

We have come full circle: Now it seems a fitting adjective to apply to consumption of resources in high-income countries.
Assembling your expertise as a behavior change specialist

- Undergrad & other training
- Professional associations
- Exposure to other cultures and languages
- Public health training, course assignments
- Expertise in behavior change
- Reading widely
- Work experiences
Do we understand each other?
Translation problems in behavior change interventions

Peter Winch

Health Behavior Change at the Individual, Household and Community Levels, 224.689
We are going to mostly talk about language this hour

- Most behavior change interventions involve communicating with people
- Communication is the intervention, critical that it be done well
- Language is central to communication
Do we understand each other?

- “Do X in order to prevent Disease Y”
Do we understand each other?

- “Do X in order to prevent Disease Y”

- Examples
  - Stop smoking to prevent lung cancer
  - Wash hands to prevent diarrhea
  - Get vaccinated to prevent measles
  - Sleep under net to prevent malaria
Do we understand each other?

- “Do X in order to prevent Disease Y”

Local illness terminology: What do people think Y is?
Do we understand each other?

- “Do X in order to prevent Disease Y”

  Understandings of etiology: What do people think causes Y?

  Local illness terminology: What do people think Y is?
Do we understand each other?

- “Do X in order to prevent Disease Y”

  - Standards of efficacy: Do people think X works?
  - Understandings of etiology: What do people think causes Y?
  - Local illness terminology: What do people think Y is?
First few classes

- Will introduce terminology for us to analyze communication problems
- Will return to this terminology later in the course when we discuss the limitations of different approaches to behavior change
Concepts being introduced

- “Do X in order to prevent Disease Y”

  - Scientific, empirical & symbolic efficacy, symptom perceptualization
  - Naturalistic & personalistic etiologies, levels of causation
  - Emic, etic, cognitive domain, illness taxonomy, nosological fusion
Terminology: Sounds and concepts

- Now we introduce some terminology from linguistics that we can draw on to describe communication problems.
- Start by discussing whether sounds in one language and heard and understood in another language.
- Then by extension talk about whether concepts in one culture are heard and understood in another culture.
- California
- Coca
- King
- Cotton

- Cairo
- Cola
- Kong
- Cough
<table>
<thead>
<tr>
<th>Kalifornia</th>
<th>Khairo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khoka</td>
<td>Kola</td>
</tr>
<tr>
<td>Khing</td>
<td>Kong</td>
</tr>
<tr>
<td>Kotton*</td>
<td>Khough</td>
</tr>
</tbody>
</table>

* Can be both?
What have we learned

- The K in King and the K in Kong are not equivalent phonetically
- The K in King is aspirated
- The K in Kong is unaspirated
- But: Switching the two phonetic sounds does not change the meaning
  - \( K^h \text{ing} \ K \text{ong} \) means the same thing as \( K \text{ing} \ K^h \text{ong} \)
Phonemes

- $K^h$ and $K$ differ phonetically, but are the same phoneme in English.
- In English, switching them does not change the meaning, it is not “a difference that makes a difference” (Gregory Bateson).
- In many other languages like Hindi, Bengali & Thai they are different phonemes.
- This is demonstrated by the existence of distinct letters to represent them in other alphabets.
Phonemes: Recap

- **Phonemes** are the different sounds that are recognized by the speakers of a language, and that convey differences in meaning.

- **Example #1**: The Ks in King and Kong are phonetically different, but in English they are the same phoneme.

- **Example #2**: B and P are the same phoneme in Arabic, but different phonemes in English.
The \( \text{K}^h - \text{K} \) distinction as a prototype for cultural differences

- This is a difference that makes a difference (changes meaning of words) in other languages
- The difference is subtle and easy to miss
- You need to be sensitized to know what to listen for, or you will never notice
- You need to be a good listener (see article by Paul and Demarest in Class 12)
From sounds to concepts

- Phonetic: Describes the sounds in a “universal” way, and be applied to many different languages, not specific to one language
- Phonemic: Describes what sounds change the meaning of words in a specific languages
- How do we describe whether a term or concept is specific to one culture?
How do these two lists differ?

List #1
- The flu
- Chest cold
- Nervous breakdown
- The runs
- Broken collarbone
- Heart attack

List #2
- Influenza
- Pneumonia
- Acute psychosis
- Diarrhea
- Fractured clavicle
- Myocardial infarction
Emic and etic
“Etic”

- These terms became popular in the 1950s and 1960s
- Terms created by chopping off the endings from phonemic and phonetic
- **Phonetic**: Attempt to describe the sounds in a language using a phonetic alphabet that is “universal” and can be used for any language
- By analogy, biomedical disease classifications are “etic”, in that they are purported to be “universal” and independent of culture
“Emic”

- By extension, emic concepts and terms refer to concepts and terms that are meaningful in the local culture
## Relations between the 4 terms

<table>
<thead>
<tr>
<th></th>
<th>“Universal”, not specific to one language or culture</th>
<th>Specific to one culture or language</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sounds</strong></td>
<td>Phonetic symbols</td>
<td>Phonemes</td>
</tr>
<tr>
<td><strong>Terms, concepts, categories</strong></td>
<td><strong>Etic</strong> terms, concepts and categories</td>
<td><strong>Emic</strong> terms, concepts and categories</td>
</tr>
</tbody>
</table>
Etic versus emic terms

**Emic (illnesses)**
- The flu
- Chest cold
- Nervous breakdown
- The runs
- Broken collarbone
- Heart attack

**Etic (diseases)**
- Influenza
- Pneumonia
- Acute psychosis
- Diarrhea
- Fractured clavicle
- Myocardial infarction
**Etic terms**: Universal system of classification, with objective definition for each term.

- Emic terms for Culture #1
- Emic terms for Culture #2
- Emic terms for Culture #3
Emic and etic: Current views

- Much scepticism about these distinctions in the current literature
- Rather than being culture-free and universal, etic terms are seen as one other set of culture-bound terms
- Biomedicine seen as one other ethnomedical system, the “culture” of medicine
Two scenarios for emic-etic correspondence
Two scenarios for emic-etic correspondence

1. Many different emic terms for one etic term
2. Many different etic terms for one emic term
Many different emic terms for one etic term
Many different emic terms for one etic term

- Usually indicates that distinctions are made in the local culture that are not recognized by outsiders
- Examples:
  - Many words for snow in arctic cultures
  - Many words for diarrhea in settings where diarrhea incidence is high
<table>
<thead>
<tr>
<th>Local term for type of diarrhea (Sindh Province, Pakistan)</th>
<th>Approximate English translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pani jehra dast</td>
<td>Watery diarrhea</td>
</tr>
<tr>
<td>Sawa dast</td>
<td>Green diarrhea</td>
</tr>
<tr>
<td>Achha dast</td>
<td>White diarrhea</td>
</tr>
<tr>
<td>Badhazmi wara dast</td>
<td>Diarrhea due to indigestion</td>
</tr>
<tr>
<td>Peela/ phikka dast</td>
<td>Yellow diarrhea</td>
</tr>
<tr>
<td>Mitti jehra dast</td>
<td>Color like clay/dust</td>
</tr>
<tr>
<td>Rat wara dast</td>
<td>Bloody diarrhea</td>
</tr>
<tr>
<td>Paichish</td>
<td>Dysentery</td>
</tr>
<tr>
<td>Mikkh wari paichish</td>
<td>Dysentery with mucus</td>
</tr>
<tr>
<td>Darg darg dast</td>
<td>Diarrhea mixed with water and stool</td>
</tr>
</tbody>
</table>
Many different emic terms for one etic term

- Common situation in public health
  - Of the many emic terms, we pick the term for the most common form
  - This term is more widely understood
  - BUT: This term refers to a condition not seen as serious
  - People wonder why we are so concerned about a trivial problem
Many different etic terms for one emic term
Many different etic terms for one emic term

**ETIC**
- Pediatric neurosurgeon
- Developmental psychologist
- Agricultural engineer
- Computer programmer
- Health economist
- Social network specialist
- Nuclear physicist

**EMIC**
- Doctor
Many different etic terms for one emic term

- Usually indicates that distinctions are made by outsiders that are not recognized in the local culture
- Examples:
  - Many words for different kinds of educated people
  - Many words for different viruses
Many different etic terms for one emic term

- Where this becomes a problem is where there is one local term corresponding to different biomedical terms for mild and severe conditions
- We have a awe-inspiring term for this situation: nosological fusion
Separate etic disease terms/nosologies for one emic term (Nosological fusion)

- Disease/nosology with high case fatality rate
- Disease/nosology with low case fatality rate

One local/emic term includes both
Separate etic nosologies for one emic category: When does this happen?

<table>
<thead>
<tr>
<th>Local/emic term means:</th>
<th>Common conditions with low CFR</th>
<th>Less common conditions with high CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Convulsions in general</strong></td>
<td>Febrile convulsions</td>
<td>Cerebral malaria Meningitis</td>
</tr>
<tr>
<td><strong>Bite by dog in general</strong></td>
<td>Bite by non-rabid dog</td>
<td>Bite by rabid dog</td>
</tr>
</tbody>
</table>
Separate etic nosologies for one emic category: What people experience

<table>
<thead>
<tr>
<th>Step</th>
<th>Apparent cure rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step #1: Seek care from traditional healer</td>
<td></td>
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<tr>
<td>Step #2: Go to hospital if traditional medicines fail to alleviate the symptoms</td>
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