Understanding risk and behaviour: a socio-ecological model

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Overview of today’s presentation

- Socio-ecological model
- Implications for BCC
- Implications for M&E

Average monthly clinic visits
Ecology and Social Ecology

• Ecology (derived from the biological sciences):
  • Describes the complex interrelationships among organisms and the environment in which they are embedded

• Social Ecology
  • The study of the influence of the social context on behavior, including institutional and cultural variables (Sallis & Owen, 2002)
Transformational Communication and Networks for Development

Capacity building activities with Centers of Excellence improve and sustain effective communication

Communication used to overcome barriers to normative & social and behavior change

**INDIVIDUAL**
- Healthy behavior
- Knowledge & skills
- Beliefs & values
- Self-efficacy
- Perceived norms
- Perceived risk
- Emotion

**FAMILY & PEER NETWORKS**
- Parenting skills
- Positive peer influence
- Social support
- Supportive partner relationships

**COMMUNITY**
- Leadership
- Equal Participation
- Information equity
- Equal access to resources & services
- Shared ownership
- Collective efficacy
- Social capital

**SOCIETY**
- Committed leadership
- Supportive policies
- Positive religious & cultural values
- Equitable gender norms
- Supportive media
- Media & technology access
- Income equity
Two key features of social ecology (systems approach)

- **Embeddedness**
  - One system is nested in hierarchy of other systems at different levels of analysis

- **Emergence**
  - System at each level is greater than the sum of its parts
Key ideas behind S-E model

- Factors at multiple levels affect human behavior
- Essential to understand and address barriers and constraints to behavior change at multiple levels
- Unrealistic to expect individuals to change behavior if barriers at higher levels are insurmountable
Implications of social ecological approach for behavior change

- Interventions for planned change should address all four levels to be effective:
  - Individual
  - Social network
  - Community
  - Societal
- Communication interventions
  - Can overcome barriers at each level
  - Facilitate change
If social change supports individual change, more self-sustaining

<table>
<thead>
<tr>
<th>Social Change</th>
<th>Individual Change</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>NO</td>
<td>Maintenance of status quo</td>
</tr>
<tr>
<td>YES</td>
<td>NO</td>
<td>Limited health improvement</td>
</tr>
<tr>
<td></td>
<td>YES</td>
<td>Increased potential for health improvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-sustained health improvement</td>
</tr>
</tbody>
</table>
Implications for Monitoring and Evaluation (M&E)

- Much of program evaluation has focused on the individual only.
- Rarely does a single data source measure more than one level.
  - Example: policy level AND individual behavior.
  - Exceptions: DHS measures individual and some community variables.
Main challenges facing evaluators

- Developing the right indicators
  - To reflect appropriate levels

- Indicators must be:
  - Relevant to the appropriate level
  - Reliably measurable
  - Conceptually sound
  - Amenable to change
Using the correct measurement and analytic approaches

- Allow inferences about causal links across levels of analysis
- How to make connections about change at two levels
  - Ex: individual and social change
  - How both relate to communication intervention(s)
Difficulty of testing the effects of the drivers of the epidemic

- Researchers can test the effects of specific interventions through controlled trials
  - Example: male circumcision

- Researchers can’t “manipulate” the drivers in an experimental sense:
  - Example: status of women, poverty
...and as with any other evaluation

- The eternal challenge:
  - Standardized indicators endorsed by international agencies

  versus

- Indicators generated through participatory processes
Questions?