Behavior Change Approaches
To Facilitate Clean Cooking and Reduced HAP

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USAID WASHplus Project
FHI 360
Behavior change approaches relevant to cross-cutting editorial content of the special journal issue and to reducing HAP
Framework for Impact – HAP

Access to Hardware and Services
- Improved Stoves
- Chimneys
- Efficient fuels
- “Crib” for small children

Promotion & Demand Creation
- Communication
- Social mobilization
- Community participation
- Social marketing
- Training

Improved Indoor Air Quality

Enabling Environment
- Policy improvement
- Institutional strengthening
- Financing and cost-recovery
- Cross-sectoral coordination
- Partnerships
Yes! We can change behaviors

B&M Gates-funded Alive and Thrive Project

Increased exclusive breastfeeding

Percent exclusively breastfed

<table>
<thead>
<tr>
<th>Year</th>
<th>Bangladesh</th>
<th>Ethiopia</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 Before program</td>
<td>19%</td>
<td>72%</td>
<td>49%</td>
</tr>
<tr>
<td>2013 During A&amp;T program</td>
<td>80%</td>
<td>83%</td>
<td>63%</td>
</tr>
</tbody>
</table>

* A&T intensive areas only

KEY
- Bangladesh
- Ethiopia
- Viet Nam
Impacts on 7 indicators for child growth and development in Bangladesh

1. Early initiation of breastfeeding
   INCREASED 64% to 95%

2. Exclusive breastfeeding under 6 months
   INCREASED 49% to 86%

3. Introduction of solid, semi-solid or soft foods
   INCREASED 46% to 98%

4. Minimum dietary diversity
   INCREASED 32% to 62%

5. Minimum meal frequency
   INCREASED 42% to 72%

6. Minimum acceptable diet
   INCREASED 16% to 49%

7. Consumption of iron-rich or iron-fortified foods
   INCREASED 40% to 79%
Community Led Total Sanitation / CLTS

Social Mobilization, Interpersonal Communication, Improved Supply and Finance, Governance

Change Social Norms

Disgust
Shame
Fear

Led to dramatic changes in latrine coverage and BEHAVIOR

In Amhara region of Ethiopia, 26% drop in open defecation in region of 19 million

In Bangladesh,

34% in 1990,
19% in 2000,
3% in 2012
HIV Prevention & Treatment
SWITCH
HOW TO CHANGE THINGS WHEN CHANGE IS HARD

CHIP HEATH & DAN HEATH
THE BESTSELLING AUTHORS OF MADE TO STICK
The metaphor of the rider and the elephant suggesting strategies for change

- Direct the rider
- Motivate the elephant
- Shape the path
The metaphor of the rider and the elephant suggesting strategies for change

Direct the rider

Motivate the elephant

Shape the path
Direct the rider

• Be crystal clear about what behavior(s) you are targeting
• … and who’s behavior you’re aiming to change!
Who is the rider?

For HAP and clean cooking

• Head of household
• Mothers
  – All mothers
  – Mothers of children < 2? < 5s?
• Stove manufacturers
• Policy makers
• Microfinance
• NGOs
Direct the Rider

Each ‘behavior’ a set of complex, inter-related practices

Stoves
• Select it
• Buy it or finance it
• Use it
  - consistently
  - correctly
• Maintain it
• Sustain it

Other behaviors,
j ust on the consumer side:
• Ventilation
• Cooking location
• **Fuel gathering and preparation**
• Childcare
Small doable actions
(shrinking the change!)

Identify, promote and facilitate improved behaviors that....

- Have significant positive impact on health
- Are feasible to achieve, (people both willing and able to make changes)
## Small Doable Actions to Improve Indoor Air Quality

**Illustrative examples**

<table>
<thead>
<tr>
<th>Pollution Behavioral cluster</th>
<th>Possible Small Doable Actions/Improved Practices</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tending fires</td>
<td>• Dry wood//dung before burning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use smaller pieces of wood</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reduce duration of burning</td>
<td></td>
</tr>
<tr>
<td>Stove maintenance and use</td>
<td>• Fix holes in stove and/or flues</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Clean and maintain stoves and flues</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use pots that correctly fit stove openings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use more efficient fuel burning stove</td>
<td></td>
</tr>
<tr>
<td>Ventilation use</td>
<td>• Construct eaves spaces for roofline release of smoke</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Promote cross ventilation, using doors and windows as appropriate.</td>
<td></td>
</tr>
<tr>
<td>Safer child location practices while fires are burning</td>
<td>• Keep children away from fires (but still attended)</td>
<td></td>
</tr>
</tbody>
</table>
The metaphor of the rider and the elephant suggesting strategies for change

Direct the rider

Motivate the elephant

Shape the path
We need to systematically understand what motivates a particular behavior for a particular target group.
Some Common Determinants of Behavior

*across many theories of change*

- Knowledge
- Perceived risk
- Perceived consequences
- Self-efficacy
- Perceived social norms
- Attitudes
- Intentions
- Access to products
- Availability & quality of services
- Policy
- Skills
- Culture and traditions
A word about knowledge

Knowledge is necessary, but not sufficient!

- Identify key information
  - Skills like fuel prep
  - Place to buy
  - XXX
- … and then what else ???
Find the feeling!

From WASH

Handwashing
• Disgust, affiliation, nurture

Stopping Open Defecation
• Dignity, pride

Purchasing a latrine
• Being modern, social status

Stoves
• Modern, saving money for kids, able to charge phones
Health is rarely the strongest motivator for behavior

Significant Statistical Differences in Perceptions of Latrine Owners and Open Defecators in Amhara, Ethiopia  
*(USAID Hygiene Improvement Project/WSP)*

<table>
<thead>
<tr>
<th>Perception Areas</th>
<th>Specific Content</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal/Family Image</td>
<td>Makes you popular</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Gets you community respect</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Makes you respected by visitors</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Makes you look modern</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Makes your family proud</td>
<td>✔</td>
</tr>
<tr>
<td>Comfort/Safety</td>
<td>Provides safety to women all day long</td>
<td>✔</td>
</tr>
<tr>
<td>Cleanliness</td>
<td>Keeps compound clean</td>
<td>✔</td>
</tr>
<tr>
<td>Health</td>
<td>Reduces diarrhea</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Reduces disease</td>
<td>✔</td>
</tr>
</tbody>
</table>

Health is rarely the strongest motivator for behavior
What Influences WASH/HAP Behaviors??
3 powerful behavioral determinants

If I do the behavior, I get something I want

**POSITIVE** = Perceived & real consequences and outcomes

**EASY!** = I can do the behavior without much effort
Skills, self-efficacy, barriers like financing

**POPULAR!** = Other people think I should do it
Perceived social norms
5 attributes contributing to Diffusion of Innovation (Rogers)

1. **Ease** of which the innovation can be understood and used
2. The **opportunity to experiment** with it on a limited basis
3. The **relative advantage** of the innovation over existing practice
4. The **ease** with which the innovation can be observed before adoption, and
5. **Compatibility** with existing values and needs.
The metaphor of the rider and the elephant suggesting strategies for change

Shape the path
The 4Ps of Marketing

- Price
- Place
- Promotion
- Product

the marketing mix
Developing the marketing mix...

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>PRICE</th>
<th>PLACE</th>
<th>PROMOTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hi-tech, efficient and accessible wood stove</td>
<td>1. Product needs discounting or credit to be accessible</td>
<td>1. Engagement and partnership with an EXISTING DISTRIBUTOR that can:</td>
<td>1. Build around modern kitchen concept</td>
</tr>
<tr>
<td>2. Traditional cooking experience with improved safety, comfort and convenience</td>
<td>2. ICS retail prices are too low to justify a MFI loan</td>
<td>• leverage economies of scale, minimize transaction costs</td>
<td>2. Consumers highly influenced by community opinion</td>
</tr>
<tr>
<td>3. Differentiate two distinct ICS product categories (Value &amp; Premium)</td>
<td>3. Perceived value of ICS lower than electric rice cooker &amp; LPG stove</td>
<td>• incorporate ICS activation within existing product lines and retail channels</td>
<td>3. Tend to buy familiar, popular and proven brands</td>
</tr>
<tr>
<td>4. Bundle the Modern Chula with other kitchen appliances and products</td>
<td>4. Profitable, sustainable financing possible when ICS is bundled</td>
<td></td>
<td>4. Seek new products that will make life more comfortable, convenient and increase their social status</td>
</tr>
</tbody>
</table>
Key role of enabling technologies >> HAP

For habits to be formed, the behavior needs to be repeated in a stable context (Verplanken & Wood, 2006)

- Habit formation
- Reminders
- Cues to action
The metaphor of the rider and the elephant suggesting strategies for change

- Direct the rider
  - Who’s behavior?
  - What do you want them to do?

- Motivate the elephant
  - What is your hypothesis of change?
  - Which determinants most influential?

- Shape the path