Getting behavioral determinants right: Quantitative measures check strategic priorities for breastfeeding in Viet Nam
Ann Jimerson, Silvia Alayón, Danielle Naugle
• Why breastfeeding matters
• *Results:* Rapid, large-scale behavior change is possible
• Using QUALitative data to make program choices in Viet Nam
• *Example:* How QUANTitative measures of people’s beliefs may enhance choice of priority behavioral determinants
Is Alive & Thrive “doing” social marketing?

Six benchmarking criteria of social marketing

- Behavior change is the objective
- Consumer/formative research
- Audience segmentation (targeting, tailoring)
- Exchanges that are attractive and motivational
- Marketing mix (not just advertising or communications)
- “The competition” is considered

Alan Andreasen’s
6 benchmarking criteria (2002)
Evidence-based process for social and behavior change

Johns Hopkins University, Center for Communication Programs

USAID, C-Change
Implementation framework for scaling up behavior change

**Partnerships & alliances in the health system and other sectors for scale and sustainability**

**Advocacy**

**Interpersonal communication & community mobilization**

**Mass communication**

- Policy makers & legislators
- Employers
- Staff of multiple sectors
- Service providers & community leaders
- Family
- Mothers Caregivers

**Strategic use of data**

**Improved health outcomes**

- Improved knowledge, beliefs, skills, and environment
- Improved breastfeeding & complementary feeding practices
Applying 3 powerful behavioral determinants

1. If I do the behavior, I get something I want
   Perceived consequences = FUN!

2. I can do the behavior without much effort
   Self-efficacy = EASY!

3. Other people, whose opinions matter to me, think I should do the behavior
   Perceived social norms = POPULAR!

A rule of thumb derived from several behavioral theories, including Reasoned Action Approach
Why breastfeeding matters
Recommended breastfeeding practices save lives, improve outcomes

**IMPROVING BREASTFEEDING PRACTICES**

**COULD SAVE MORE THAN 820,000 LIVES A YEAR**

**SOURCE: THE LANCET BREASTFEEDING SERIES**
Recommended breastfeeding practices save lives, improve outcomes

*The Lancet* Breastfeeding Series confirms:

*Each year of breastfeeding decreases a woman’s chance of developing invasive breast cancer by 6%*
WHO and UNICEF recommend exclusive breastfeeding for 6 months

Exclusive breastfeeding = 5 small doable actions

• Give breastmilk
• Do not give water
• Do not give infant formula
• Do not give other liquids
• Do not give semisolid or solid food
Results:
Rapid, large-scale behavior change is possible
IMPACT: Rapid, large-scale improvement in breastfeeding is possible

*A&T intensive areas only
Using QUALitative data to make program choices in Viet Nam
QUALitative learning on exclusive breastfeeding in Viet Nam
Behavior change hypothesis for exclusive breastfeeding, Viet Nam

Program
- Advocacy
- Counseling
- Community mobilization
- Doctor support
- Mass media campaign

Determinants/ Beliefs
- Knowledge/beliefs about “nurse more”
- Self-efficacy about “nurse more” to make more

Small doable actions
- To increase number of breastfeeds

Behavior
- To feed only breastmilk for 6 months (exclusive breastfeeding)
“Nurse more”
Behavior change hypothesis for exclusive breastfeeding, Viet Nam

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Small doable actions
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- To feed only breastmilk for 6 months (exclusive breastfeeding)
“No water”
Example:
How QUANTitative measures of people’s beliefs may enhance choice of priority behavioral determinants
<table>
<thead>
<tr>
<th>Survey questions to QUANTify beliefs (behavioral determinants)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nurse more</strong></td>
</tr>
<tr>
<td>(Q 6.1.4) If a mother thinks her 4-month-old infant is not getting enough breastmilk, what should she do?</td>
</tr>
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<td>“Nurse more”</td>
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<tr>
<td>(Q 6.5.7) The more I breastfeed my infant, the more breastmilk my body will produce</td>
</tr>
<tr>
<td>“Agree”</td>
</tr>
<tr>
<td><strong>No water</strong></td>
</tr>
<tr>
<td>(Q 6.1.10) In what month do you think an infant should START receiving plain water in addition to breastmilk?</td>
</tr>
<tr>
<td>“After 6 mos.”</td>
</tr>
<tr>
<td>(Q 6.3.1) If I am breastfeeding, but DO NOT give my infant water until s/he completes 6 months, my infant will be <strong>thirsty</strong></td>
</tr>
<tr>
<td>“Disagree”</td>
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<tr>
<td>(Q 6.3.8) If I DO NOT clean my infant’s mouth out with water after breastfeeding, my infant will get <strong>thrush</strong></td>
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<td>“Disagree”</td>
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<tr>
<td>(Q 6.3.10) If I am breastfeeding my 5 month old infant, but DO NOT give my infant water, s/he will be <strong>too hot</strong></td>
</tr>
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<td>“Disagree”</td>
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</table>
Criteria for promising message strategies

- Substantial number of people not in desired position on the belief (determinant)
- Substantial relation between the belief and the behavior
- Feasible to move the audience on the belief

Hornik and Woolf
Using cross-sectional surveys to plan message strategies
Social Marketing Quarterly, 1999
Is holding the specific belief associated with the behavior?

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**Quantitative data:** Examined associations between specific beliefs and EBF

Unadjusted Odds Ratios

- Knows to breastfeed more if baby not getting enough (NS): 1.19
- Believes that nursing more leads to more breastmilk (NS): 1.08
Is holding the specific belief associated with the behavior?

Program
- Advocacy
- Counseling
- Community mobilization
- Doctor support
- Mass media campaign

Determinants/ Beliefs
- Knowledge/beliefs about “nurse more”
- Self-efficacy about “nurse more” to make more
- Knowledge/beliefs about “no water”
- Self-efficacy about “no water”
- Social norms about “no water”

Small doable actions
- To increase number of breastfeeds
- To NOT give water

Behavior
- To feed only breastmilk for 6 months (exclusive breastfeeding)
Is there room to “improve” the belief?

**Program**
- Advocacy
- Counseling
- Community mobilization
- Doctor support
- Mass media campaign

**Determinants/Beliefs**
- Knowledge/beliefs about “nurse more”
- Self-efficacy about “nurse more” to make more
- Knowledge/beliefs about “no water”
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- Social norms about “no water”

**Small doable actions**
- To increase number of breastfeeds
- To NOT give water

**Behavior**
- To feed only breastmilk for 6 months (exclusive breastfeeding)
Quantitative data: Identified determinants with “room to improve”

Percent of women who held the belief

- Knows to breastfeed more if baby not getting enough: 4%
- Believes that nursing more leads to more breastmilk: 91%
Is there room to “improve” the belief?

Program
- Advocacy
- Counseling
- Community mobilization
- Doctor support
- Mass media campaign

Determinants/Beliefs
- Knowledge/beliefs about “nurse more”
- Self-efficacy about “nurse more” to make more
- Knowledge/beliefs about “no water”
- Self-efficacy about “no water”
- Social norms about “no water”

Small doable actions
- To increase number of breastfeeding
- To feed only breastmilk for 6 months (exclusive breastfeeding)

Behavior
- To NOT give water
Quantitative data: Which beliefs would be the most promising to address?

- Is confident her body can produce enough breast milk (OR 1.08 NS; prevalence 91%)
- Knows to breastfeed more often if baby not getting enough breast milk (OR 1.19 NS; prevalence 4%)
- Knows water should be introduced after 6m (OR 1.35; 40%)
- Disagrees baby will be thirsty (OR 2.84; 41%)
- Disagrees baby will get thrush (OR 3.13; 43%)
- Disagrees baby will get hot (OR 2.91; 39%)

Promising message strategies

Weak or no relation between belief and EBF

Strong relation between belief and EBF
How “sticky” were the messages?

Program RECALL

• Recalled “nurse more” messages
• Recalled “no water” messages

Determinants/ Beliefs

Knowledge/beliefs about “nurse more”

Self-efficacy about “nurse more” to make more

Knowledge/beliefs about “no water”

Self-efficacy about “no water”

Social norms about “no water”

Small doable actions

To increase number of breastfeeds

To feed only breastmilk for 6 months (exclusive breastfeeding)

To NOT give water

Behavior
**Results:** Little recall of “nurse more”; high recall of “no water” messages

![Chart showing recall of messages](image)

- Little recall of “nurse more”
- High recall of “no water” messages

- **Nurse More**
  - Nurse more leads to more breastmilk: 8%
  - Breastfeed > Signal > More breastmilk: 1%
  - Continue to breastfeed if you don't have enough: 0%

- **No Water**
  - A few drops of water can make baby sick: 41%
  - Breast milk has enough water: 23%
  - No rinsing mouth with water for children <6m: 34%
  - Recall of “No Water” messages: 0%
Results: Beliefs about “no water” more strongly associated with recall

- Believes that nursing more leads to more breastmilk:
  - Exposed/recalled: 99%
  - Unexposed/Did not recall: 95%

- Knows to nurse more if baby not getting enough:
  - Exposed/recalled: 20%
  - Unexposed/Did not recall: 8%
How “sticky” were the messages?

**Program RECALL**

- Recalled “nurse more” messages
- Recalled “no water” messages

**Determinants/Beliefs**

- Knowledge/beliefs about “nurse more”
- Self-efficacy about “nurse more” to make more
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- Social norms about “no water”

**Small doable actions**

- To increase number of breastfeeds
- To NOT give water

**Behavior**

- To feed only breastmilk for 6 months (exclusive breastfeeding)
Did women adopt the beliefs the program promoted?

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<td>To NOT give water</td>
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**Results:** Beliefs on “nurse more” improved slightly; “no water” up

Changes in beliefs

- Knows to breastfeed more
- Confident body can produce enough breast milk
- Knows to introduce water after 6m
- Disagrees infant will be thirsty
- Disagrees infant will get thrush
- Disagrees infant will be hot
Did women adopt the beliefs the program promoted?

**Program**
- Advocacy
- Counseling
- Community mobilization
- Doctor support
- Mass media campaign

**Determinants/ Beliefs**
- Knowledge/beliefs about “nurse more”
- Self-efficacy about “nurse more” to make more
- Knowledge/beliefs about “no water”
- Self-efficacy about “no water”
- Social norms about “no water”

**Small doable actions**
- To increase number of breastfeeds
- To NOT give water

**Behavior**
- To feed only breastmilk for 6 months (exclusive breastfeeding)
Did women take up the small doable actions?

**Program**
- Advocacy
- Counseling
- Community mobilization
- Doctor support
- Mass media campaign

**Determinants/ Beliefs**
- Knowledge/beliefs about “nurse more”
- Self-efficacy about “nurse more” to make more
- Knowledge/beliefs about “no water”
- Self-efficacy about “no water”
- Social norms about “no water”

**Small doable actions**
- To increase number of breastfeeds
- To NOT give water

**Behavior**
- To feed only breastmilk for 6 months (exclusive breastfeeding)
**Results:** Small doable actions for “no water” improved more than “nurse more” actions
Did women take up the small doable actions?

Program

- Advocacy
- Counseling
- Community mobilization
- Doctor support
- Mass media campaign

Determinants/ Beliefs

- Knowledge/beliefs about “nurse more”
- Self-efficacy about “nurse more” to make more
- Knowledge/beliefs about “no water”
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- Social norms about “no water”

Small doable actions

To increase number of breastfeeds

Behavior

To feed only breastmilk for 6 months (exclusive breastfeeding)

To NOT give water
Behavior change hypothesis for exclusive breastfeeding, Viet Nam

Program

- Recalled “nurse more” messages
- Recalled “no water” messages

Determinants/ Beliefs

Knowledge/beliefs about “nurse more”
Self-efficacy about “nurse more” to make more

Small doable actions

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