

Blog post December 12, 2017

## Stop the Guessing: Fighting Cholera through Better Formative Research



[1]

[Tom Davis, MPH](#) [1]

Global Sector Lead for Sustainable Health, World Vision International



[2] Little girl practices safe hand washing

In order to be successful in our efforts to stop cholera, we need to better understand why some people adopt behaviors that stop cholera, while others do not. Although we all have pet theories on why people decide to do things based on our own anecdotal experience, we can often be wrong. To decide if vaccines and antibiotics are effective, we don't sit around a table and guess - we would consider this highly unethical and unscientific. Yet when it comes to promoting behaviors, that's what many projects end up doing. We need to stop the guessing, and conduct better formative research on the behavioral determinants for WASH behaviors and cholera immunization.

Among the more popular formative research methods for identifying behavioral determinants are Barrier Analysis, RANAS, and the Alive & Thrive methods. Barrier Analysis (BA) is a rapid formative research tool used to identify behavioral determinants associated with a particular behavior so that improved behavior change messages and support activities can be used to facilitate behavior change [1]. A key feature of BA is that it statistically compares responses of people doing a behavior (the "Doers") with those who are not ("Non-doers"). While studying water treatment in the Dominican Republic in 1990, I developed Barrier Analysis based on the Health Belief Model [2] and the Theory of Reasoned Action, and subsequently revised it based on the doer/non-doer analysis approach. Since then, hundreds of BA studies have been conducted by at least 33 international non-governmental organizations in 33 countries to study determinants of behaviors related to water, sanitation and hygiene, and other sectors.

The results of 150 BA studies are now posted online on the FSN Network's Behavior Bank [3] and some are in the published peer-reviewed literature. Analyzing these 150 studies, the most common reasons why people adopt or don't adopt behaviors - the behavioral determinants - were found to be:

- **Perceived Self-efficacy**, found in 86% of the BA studies: the belief that one can do a particular behavior given his/her current knowledge, skills, and resources. (e.g. whether or not a person believes that s/he can make it to an immunization post where cholera vaccine is offered).
- **Perceived Social Norms**, found in 77% of the studies: the perception that people important to an individual think that he/she should do the behavior (e.g., whether a person believes that his or her spouse or neighbors approve of getting the cholera vaccine).
- **Perceived positive and negative consequences**, found in 75% of the studies: the positive and negative things a person thinks will happen as a result of their performing a behavior (e.g., whether a person believes that the vaccine will make him or her get sick, avoid getting cholera, or become healthier overall).
- **Perceived Susceptibility** to a disease or problem, found in 45% of the studies: a person's perception of how at risk they feel to a given problem/disease (e.g., how likely a person believes it is that he or she will get cholera in the next six months).



[3] Children in Myanmar wash their hands with soap at a hand-washing station. Photo: UNICEF/NYHQ2012-2056/Dean

The behavioral determinants on hand-washing with soap found through 17 BA studies posted on the Behavior Bank found similar determinants. Having a good idea of these barriers and enablers [4] will be crucial in the battle to stop cholera. Projects that use good formative research often have excellent results. For example, a Curamericas Global project in Liberia used BA and achieved impressive results on WASH and nutrition behaviors, and possibly due to that, had one of the steepest declines in child underweight of any USAID project (44 percentage points over five years). The proportion of mothers who practiced appropriate handwashing increased from 5% at baseline to 93% five years later and proper disposal of child feces also increased from 4% to 93%.

The results from these studies are often surprising. For example, in Curamericas' BA study of child feces disposal, they found that one prevalent and erroneous belief was that diarrheal diseases were chiefly airborne, so going to a latrine with its bad smells was perceived to be a good place to contract diarrhea rather than to prevent it. Who would have guessed that? In order to stop cholera, we need to stop the guessing and use rigorous formative research.

## References:

- [1] For a full description of this method, see the latest Barrier Analysis guide, A Practical Guide to Conducting a Barrier Analysis in English, French, Spanish and Arabic (<http://www.fsnnetwork.org/practical-guide-conducting-barrier-analysis> [4]) and the Designing for Behavior Change training manual (<http://www.fsnnetwork.org/designing-behavior-change-agriculture-natural-resource-management-health-and-nutrition>) [5] which is now available in English, French, Spanish, and Bangla.

[2] See for example Koyaté et al (2015):  
<http://www.sciencedirect.com/science/article/pii/S014971891400130X> [6].

[3] See [www.fsnnetwork.org/behavior-bank](http://www.fsnnetwork.org/behavior-bank) [7]

[4] See the Ebola Barrier Analysis Compendium for more information on barriers and enablers to WASH behaviors:

<http://www.fsnnetwork.org/ebola-barrier-analysis-compendium-summary-barrier-analysis-studies-ebola-related-behaviors> [8].

**Source URL:**

<https://stopcholera.org/blog/stop-guessing-fighting-cholera-through-better-formative-research>

**Links**

[1] <https://stopcholera.org/blog/authors/tom-davis-mph>

[2] [https://stopcholera.org/sites/default/files/styles/content-zoom/public/screen\\_shot\\_2017-12-12\\_at\\_11.30.13\\_am.png?itok=\\_bFVu1Y\\_](https://stopcholera.org/sites/default/files/styles/content-zoom/public/screen_shot_2017-12-12_at_11.30.13_am.png?itok=_bFVu1Y_)

[3] [https://stopcholera.org/sites/default/files/styles/content-zoom/public/2\\_0.png?itok=jv-fLT0w](https://stopcholera.org/sites/default/files/styles/content-zoom/public/2_0.png?itok=jv-fLT0w)

[4] <http://www.fsnnetwork.org/practical-guide-conducting-barrier-analysis>

[5] <http://www.fsnnetwork.org/designing-behavior-change-agriculture-natural-resource-management-health-and-nutrition>

[6] <http://www.sciencedirect.com/science/article/pii/S014971891400130X>

[7] <http://www.fsnnetwork.org/behavior-bank>

[8] <http://www.fsnnetwork.org/ebola-barrier-analysis-compendium-summary-barrier-analysis-studies-ebola-related-behaviors>