INTRODUCTION

In Tanzania, nearly 30,000 people die annually due to diarrheal diseases and an estimated 12.6 percent of children suffer from diarrheal diseases. There is a widespread and deep-rooted belief that diarrhea is part of growing up and cannot be prevented. Working with the government and with non-governmental organizations, the Water and Sanitation Program (WSP) sought to increase rates of handwashing with soap among women and children, especially at critical junctures.

Initial support started in 2005 with the development of the Public-Private Partnership for Handwashing and small-scale formative research which showed that while knowledge of the reasons to wash hands was high, the practice was low, with just four percent of mothers and five percent of children reporting that they wash hands with soap. In 2006, WSP began to scale up the handwashing program across ten rural districts with end-of-project targets that included 1.25 million women and children practicing improved handwashing behaviors; 14.5 million women and children ages 5 to 14 exposed to behavior change messaging through the radio; 300,000 women and children reached through Interpersonal Communication (IPC) activities; and the attendance of 170,000 people at Direct Consumer Contact (DCC) events. To analyze the health and poverty impacts, intervention areas were selected to produce a representative sample of the general population.

This Learning Note documents the development of the project, with a focus on how it was designed, implemented, and monitored. Challenges and lessons learned are highlighted to assist program managers in designing and managing evidence-based handwashing with soap and/or other hygiene promotion programs.

Key findings

- While designing a behavior change intervention from an evidence base is critical, limited formative research can be analyzed in the FOAM framework and information gaps can be filled with small-scale spot research.
- Designing a behavior change communication campaign across mutually reinforcing channels may prove to be a particularly effective approach to changing behaviors.
- Behavior change often takes place through an evolving process; programs designed to be multi-phased, with evolving objectives, may help support behavior shifts.
ACTION

Research

The team’s first steps toward developing an evidence-based behavior change program focused on gathering and conducting research to better understand the target audience—including current understandings, feelings, and actions toward handwashing.

Initial formative research indicated that people would tend to rinse hands when they were visibly dirty, but that the use of soap for handwashing was not widespread. Additionally, respondents indicated that handwashing with soap was an extra burden and many of those surveyed felt they were too busy to wash their hands with soap.

Findings from the formative research were analyzed using FOAM,6 a framework designed to identify behavioral determinants for handwashing, and their relative role in shaping handwashing behavior (Figure 1). Communication objectives were identified based on the identification of determinants (Figure 2) and these were shared with the Government of Tanzania and key stakeholders to facilitate engagement throughout the process.

Additional research was conducted to test preliminary creative concepts developed at a multi-sectoral workshop. In order to identify the “trigger” that would motivate women to improve their handwashing behavior, representatives from the hygiene sector generated several creative concepts based on the results of the formative research, their own experience, and a field visit. These were tested with rural women at focus group sessions led by marketing research specialists who worked at a private sector soap company providing technical support to the partnership. An important insight was that mothers felt burdened with responsibility for raising children, but were rarely thanked or rewarded, and asking them to focus on handwashing with soap was felt to be an extra burden. Two ideas emerged from this experience, “Mother is the Pillar of the Home” (“Mama Nguzo”) and “Heroes Make Heroes.” Both concepts acknowledged mothers for all they did—including teaching handwashing with soap—rather than rebuking them for what was not done.

Design

Following testing, a creative brief was developed at a multi-sectoral workshop (Figure 3). The brief was provided to an advertising agency that ultimately developed the communications idea

---

“Mikono Yenye Fahari” (“Hands To Be Proud Of”). This concept formed the backbone of the campaign: it tapped into mothers’ aspirations for recognition, their pride in the work they do for their families, and their role as the central pillar of the family. The design went through several iterations and was pre-tested through focus groups and key informant interviews. Spot research was also undertaken to close gaps in the evidence base, particularly around beliefs and knowledge about the link between handwashing with soap and acute respiratory infection.

IMPLEMENTATION

Integrated Channels

Key messages were promoted through multiple integrated channels, which has been shown to be effective for behavior change in other sectors such as HIV/AIDS, malaria, and reproductive health. When an individual receives a consistent message through multiple channels it reinforces social norms around the behavior. Messaging across three channels, mass media, Direct Consumer Contact (DCC) and Interpersonal Communication (IPC) was harmonized by the development of a single creative brief.

Mass media offers constant reminders and cues to action. Radio was selected as the mass media carrier based on research that indicated that television coverage was low and radio influence high in rural areas.

Interpersonal Communication can target building knowledge and skills. Activities—including visits to homes, schools, and health centers—were carried out by Front-Line Activators (FLAs). Village Executive Officers selected this unpaid, volunteer, community-based cadre of women (and occasionally men) for their self-motivation. Working through FLAs ensured not only that skills acquired through the training would remain in the community but also that messages would be delivered by a source respected by the community. The vision for this volunteer cadre was that they would serve their immediate communities and take advantage of day-to-day activities to promote handwashing with soap. Because they would be disassociated from an institutional structure, it would also be more possible to avoid nepotism and to ensure the handwashing with soap duties were not lost in the list of duties assigned to village level officials. Working with local government authorities, 45 FLAs were selected and trained in each district, reaching a total of 450 trained. While FLAs are not part of any institution or government structure, they served as a resource to promote hygiene to Village Executive Officers, Ward Executive Officers, and district-level officials.

Direct Consumer Contact events complemented IPC activities with a goal of improving their audiences’ knowledge, especially their knowledge of the ease of handwashing with soap. DCC was chosen because public events have been effective in commercial marketing to raise the enthusiasm of participants for a topic and help shifts social norms. Additionally, these events were a logical channel to improve the access portion of the opportunity determinant by introducing...
the tippy-tap, an enabling technology for handwashing\textsuperscript{7}, which many audience members had not seen before.

**Arrangement and Strategy**

The implementation arrangement, led by WSP, included government representatives, private firms, and community members (see Box 1). From the early planning stages, stakeholders were considered part of the team, and their input and buy-in was considered crucial. Introducing a behavior-change intervention of this type required stakeholders to adopt a new approach to hygiene interventions. In Tanzania, previous initiatives had been largely didactic, education-driven approaches, and it required considerable time to get stakeholders to accept a new approach. Efforts to engage stakeholders throughout the process strengthened support, increasing opportunities for both scale-up and sustainability.

A marketing team from a private soap company developed a five-stage, phased approach to help carry the target audience from an initial stage, *becoming aware of the importance of handwashing*, to *building skills to conduct improved handwashing*, to *sustaining handwashing with soap behavior* (Figure 4).

**Phase I: Awaken and Inspire**

Phase I focused on increasing knowledge about the importance of using soap, critical times for handwashing, and inspiring women to prioritize handwashing. This phase targeted the knowledge portion of the *ability* determinant, based on formative research that showed key gaps in understanding about the importance of handwashing with soap.

*Mass media*, including radio spots, call-in shows, and DJ-mentions,\textsuperscript{9} focused on when to wash hands with soap. Programs aired on national stations and one regional station between February and April 2009. Handwashing posters were also produced and distributed.

*IPC* focused on building knowledge and skills to build tippy-taps, managing availability of soap and water, and handwashing at critical times.

DCC events focused on improving knowledge around the ease of handwashing with soap and introducing the tippy-tap, which many participants had not seen before. Events were carried out by two teams: “Pathfinders” targeted smaller communities with a program that included a sound truck, master of ceremonies, and dancers; “Handwashers” targeted larger villages with a program that included music, dancers, skits, and tippy-tap demonstrations. Events lasted a couple of hours, but were filmed, quickly edited, and then shown again at night to reach a wider audience. An estimated 161,000 women and children (95 percent of the target figure) were reached in just seven months, starting in August 2009.

Several learnings emerged during this phase. First, FLAs were trained to deliver messages using an emotive approach. Reports began to indicate, however, that FLAs were experiencing difficulties conveying knowledge and skills using an emotive approach. Messages were refined to create a more pragmatic

---

\textsuperscript{7} For more information on tippy-taps and other enabling technologies for handwashing with soap, see WSP’s Enabling Technologies for Handwashing Database at [www.wsp.org/scalinguphandwashing/enablingtechnologies](http://www.wsp.org/scalinguphandwashing/enablingtechnologies).

\textsuperscript{8} For more information, see [www.wsp.org/scalingupsanitation](http://www.wsp.org/scalingupsanitation)

\textsuperscript{9} “DJ-mentions” are a subtle way to convey the handwashing message. For example, DJs invite callers to explain why their mothers are heroes. The caller might mention that their mother made sure they were well dressed every day, or that their mother took care of them when they were sick. The DJ might then segue to the handwashing message by mentioning, “Isn’t it wonderful how mothers do so much for us, like teaching us to wash our hands with soap?”

---

**BOX 1: IMPLEMENTATION ARRANGEMENT**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formative research</td>
<td>Research firm</td>
</tr>
<tr>
<td>Research analysis</td>
<td>WSP</td>
</tr>
<tr>
<td>Communications concept</td>
<td>Private firm</td>
</tr>
<tr>
<td>Mass media production and planning</td>
<td>Private firm</td>
</tr>
<tr>
<td>DCC development and execution</td>
<td>Private firm</td>
</tr>
<tr>
<td>IPC materials</td>
<td>WSP</td>
</tr>
<tr>
<td>IPC training (Training of Trainers)</td>
<td>WSP and private firm</td>
</tr>
<tr>
<td>IPC delivery</td>
<td>Community volunteers</td>
</tr>
<tr>
<td>Monitoring</td>
<td>WSP and private firms</td>
</tr>
</tbody>
</table>
Figure 4: Campaign Stages

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Role</th>
<th>Channel Use</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salience</td>
<td>Persuasion via salience</td>
<td>Image, Immediacy, Reassurance, Stature</td>
<td>1 Awaken</td>
</tr>
<tr>
<td>Credibility</td>
<td>Influence via credibility</td>
<td>Trust, Rapid Response, News, Endorsement</td>
<td>2 Inspire</td>
</tr>
<tr>
<td>Association</td>
<td>Relevance via association</td>
<td>Values, Content, Endorsement, Prestige</td>
<td>3 Empower</td>
</tr>
<tr>
<td>Engagement</td>
<td>Engagement via experience</td>
<td>Interaction, Immersion, Depth, Participation</td>
<td>4 Amplify</td>
</tr>
<tr>
<td>Relationship</td>
<td>Relationship via recognition</td>
<td>Trial, Loyalty, Personifications, Reward</td>
<td>5 Sustain</td>
</tr>
<tr>
<td>Conversion</td>
<td>Conversion via incentive</td>
<td>Trial, Urgency, Proximity, Reward</td>
<td></td>
</tr>
</tbody>
</table>

**Advertising**
- Radio and print on key junctures for handwashing with soap and the importance of soap
- Wall branding

**Public Relations**
- News coverage of campaign in newspapers
- Promoting buy-in; training local, national government on handwashing with soap

**Partnerships**
- DCC and IPC on key junctures and importance of soap
- DCC and IPC—constructing tippy-taps and washing hands

**Experiential**
- Radio sponsorship for Asante Mama
- News coverage of Asante Mama
- Radio spots of Famous people saying why their mothers are heroes as part of Asante Mama
- Handwashing with soap ambassador

**Response**
- IPC and DCC promoting mother as heroes ready for competition
- Tippy-taps comic
- Radio soap opera

**Consumer Promotions**
- DCC events for mothers as heroes ready for competition
- Tippy-taps comic
- Radio soap opera
- Asante Mama through media, DCC and IPC
approach. Second, the interventions were effective at targeting opportunity determinants (including access, availability, and product), and ability determinants (knowledge, including awareness of tippy-taps and the critical times for handwashing), but were less effective in addressing the motivation determinant (intention to wash hands with soap). In early 2010, WSP held a learning event to review the intervention and it was determined that, while IPC messages needed a more pragmatic approach, DCC and mass media should be adjusted to emphasize more emotive messages. For example, a rational benefit is that washing hands with soap can save money and prevent disease. An emotional benefit of handwashing with soap is to be a good mother and to be recognized as a hero.

Phase II: Empower and Amplify

To increase the emotive impact of the campaign, the team developed a creative brief centered on the concept of Asante Mama, which acknowledged, praised, and thanked mothers for the things they did every day for their family and children, including washing hands with soap. This phase of the campaign focused on making handwashing an intrinsic behavior, increasing women’s understanding of the tippy-tap, and building skills to better manage soap and water.

Mass media targeted social support (ability determinant), and beliefs and attitudes outcome expectations, and intentions.

IPC included the development and distribution of a ‘comic book’ that illustrated, step-by-step, how to build a tippy-tap. A graphic approach was selected due to the low rates of literacy in Tanzania. The storyline incorporated characters from the soap opera, thereby integrating with mass media, and was distributed by FLAs in 30 wards.

DCC targeted attitudes and beliefs, outcome expectations, and intention (all part of the motivation determinant), social norms (opportunity determinant), and social support (ability determinant). A competition was held in ten districts in which audience members were invited to go on stage to share why their mother was their hero, with the winner selected by audience response. Each district winner won a trip to participate in Global Handwashing Day. DCC was integrated with IPC and mass media through skits that focused on how to build a tippy-tap; skits based on the radio soap operas; and playing radio jingles at events. At events, district and community officials were invited onstage and recognized, helping to strengthen political buy-in. DCC events reached an additional 166,000 women and children during this phase (Illustration 1). Wall paintings executed on community buildings depicted a woman teaching her child to wash hands using a tippy-tap. The painting reinforced the theme of Asante Mama to integrate with mass media and DCC, and served as permanent billboards.

MONITORING

WSP hired four District Coordinators to support district governments in carrying out the implementation. The District Coordinators supervised and monitored the intervention to make sure that activities were delivered as planned and that messaging stayed on topic.

Mass Media was monitored by a local media monitoring firm that produced monthly reports showing when radio spots and soap operas actually aired.

Illustration 1: DCC Event in Igunga

During Phase II, DCC roadshow events included tippy-tap demonstrations to help improve two determinants—opportunity and ability. Above, women in Nanga, Igunga District use a tippy-tap to wash hands with soap.
IPC monitoring was done through FLAs', on a self-reported basis, using paper forms that were distributed to local government authorities. The forms were designed to record the number and type of meetings held (e.g., household, community, market, and so forth); who was reached (women ages 15–49, women over age 49, men, children); and how many people were reached on a monthly basis. However, perhaps because FLAs were unpaid community volunteers, only 67 percent of FLAs submitted forms, and data was not always complete. Additionally, there was a challenge validating reported data. Interestingly, the FLAs who submitted forms to local governments viewed it a means to demonstrate results of the work, and this helped to motivate them to record data. Additionally, WSP monitored FLA activities through spot-checks.

DCC monitoring tracked progress in implementation and the quality of the interventions. Implementing agencies also completed a form after each event to record the size and composition of the audience, topics covered, type of location, and prizes given away. Local government authorities and WSP staff monitored activities conducted by firms. Additionally, WSP validated event data through spot checks and event impact surveys (EISs), developed by WSP, and undertaken to assess how well the DCC firm transmitted messages. EISs assess the impact of live behavior change communication events by measuring reception to the communication among members of the target audience and changes in knowledge and intention.

The DCC firm administered the EIS before and after a random sample of 28 DCC events (25 percent of end-of-project target for DCC events) in five districts. Results suggest that the targeted behavioral determinants, knowledge (ability determinant) and intention (motivation determinant), had improved among those exposed to a DCC event (Figure 5). It is hoped that a gain in these determinants will be reflected in improved behavior.

**CHALLENGES**

**Geographic Arrangement of the Intervention.** Because of poor transportation, the dispersed project areas created many challenges, from delivering trainings to implementing DCC events to supervising progress.

**Developing the Creative Concept.** The time needed to develop a positive, professional, communications campaign was underestimated. It took over six months of working with the advertising firm to develop a concept that met the criteria in the creative brief and established emotive messages. This delay impacted the development of communication materials and timing of intervention across all channels.

**Strengthening the Motivation of FLAs.** Since FLAs are not paid, there is also less motivation for preferential selection. However, without compensation or an institutional structure, ongoing volunteerism has lagged. Several challenges have emerged. First, FLAs feel that they should be compensated or at least better recognized by local authorities for their efforts. The government cannot afford to provide the volunteers’ transportation or reimbursement for their time. Second, volunteers are constrained by transportation and limited geographic influence. The question then becomes how many volunteers are needed to train at scale, and the costs associated with training. More analysis is needed to understand scalability, costs, and what is financially viable for the government.

An alternative approach may be to develop a health-product sales force with basic sales training and to provision them with an initial batch of products such as soap, water treatment tablets, and condoms. This would help build income and could promote FLAs’ status in the community. Another option is to find other ways to motivate and provide incentives to FLAs. For example, in some villages, FLAs have been elected as village representative because of their raised profile as an FLA. Overall, expectations must be managed up front about what is expected of a volunteer, and how they will be recognized for their work.

**Monitoring FLAs.** Collecting data through the local government structure has proven challenging and it is likely that the figures reported are an underestimate of work conducted by FLAs. An estimated 67 percent of trained FLAs have submitted and delivered at least one form to the district government, either directly or through their village and ward leaders. Due to issues such as transportation, it is possible that an additional 20 percent of trained FLAs conducted work, but were...
not able to submit forms to the district government. Furthermore, FLAs who have submitted forms may submit only a small portion of their forms. Anecdotal evidence from discussions with FLAs suggests that the majority try to achieve their target to reach 75 women a month. To rectify the situation, the team planned a follow-up training with FLAs to review target numbers and actual reach. FLAs completed a report on the number of targets reached in the past month, and compared this against previous months.

Value of Data. FLA monitoring forms record process indicators such as number of people reached, location, and duration of visits but many officials place a low value on this data. This situation impedes the process of collecting the forms at each level, decreasing the likelihood that FLA forms will be institutionalized. FLAs have requested feedback from government officials on their reporting as well as site visits to see progress. Without this feedback FLAs are unlikely to maintain motivation.

Message Creep. During DCC events, the implementing firm would naturally start to play for laughs and key messages would gradually drop away. This can be mitigated through independent supervision by either the local government or the hiring entity, through Event Impact Survey results, which will show if the firm is not delivering the message effectively, and through message checklists.

Results

As of December 2010, the project has exceeded project targets for mass media and DCC, and reached 52 percent of the target for IPC (Table 1).

—By Yolande Coombes and Nat Paynter

WSP is a multi-donor partnership created in 1978 and administered by the World Bank to support poor people in obtaining affordable, safe, and sustainable access to water and sanitation services. WSP’s donors include Australia, Austria, Canada, Denmark, Finland, France, the Bill & Melinda Gates Foundation, Ireland, Luxembourg, Netherlands, Norway, Sweden, Switzerland, United Kingdom, United States, and the World Bank.

The findings, interpretations, and conclusions expressed herein are entirely those of the author and should not be attributed to the World Bank or its affiliated organizations, or to members of the Board of Executive Directors of the World Bank or the governments they represent.

© 2011 Water and Sanitation Program

---