Using Technology in Bangladesh to Build Health Worker Confidence and Social and Behavior Change Communication Skills

Asha Apa is a field worker based in the Chittagong District of Bangladesh. Her work begins after breakfast, when she sends her children off to school and gets ready for her day. As she leaves, Asha picks up her bag, filled with all her health education materials, and heads out to make her first visit of the day at the Suleman household. She makes sure her bag is secure and smiles as she thinks of her most valued tool that sits inside – her eToolkit on a tablet. With this tablet, which she received from the Ministry of Health and Family Welfare (MoHFW), teaching the community about health issues and staying up-to-date on her work has become so much easier. Asha never dreamed she would use this kind of technology, but once she started she found it easy.

Project Background

The Bangladesh Knowledge Management Initiative (BKMI) strengthens the capacity of the Government of Bangladesh (GoB), U.S. Agency for International Development (USAID) implementing partners and other stakeholders to develop strong, consistent and effective social and behavior change communication (SBCC) campaigns and interventions to improve the health and well-being of the people of Bangladesh.

BKMI is a three-year project under USAID’s global Health Communication Capacity Collaborative (HC3). It is jointly implemented by the Johns Hopkins Center for Communication Programs (CCP) in Baltimore, Maryland, USA, and the Bangladesh Center for Communication Programs (BCCP) in Dhaka, Bangladesh.

Assessing SBCC Capacity

BKMI’s capacity strengthening work with the Bangladesh MoHFW can be described using the SBCC Capacity Ecosystem™ Model.

The SBCC Capacity Ecosystem is a model developed by HC3 that reflects the systematic assessment, design and implementation of customized and strategic capacity strengthening for SBCC. The Ecosystem assesses capacity at the individual, organization and system levels; recognizes that capacity strengthening is a dynamic, non-linear and non-hierarchical process that involves many interacting agents; and speaks to the inherently complex, interconnected and often unpredictable nature of capacity strengthening and the dynamic environments in which we work. It also recognizes that a single activity is almost never enough to make change.

SBCC programs use the power of communication to change behaviors by influencing people’s knowledge, attitudes and social norms to improve their health and environment.

More information about the Ecosystem is available at http://healthcommcapacity.org/sbcc-capacity-ecosystem/.
At the beginning, BKMI used a standardized capacity assessment tool to map the capacity of the three MoHFW units responsible for SBCC for health, nutrition and family planning. Subsequently, BKMI supported the units – the Bureau of Health Education (BHE) and the Institute of Public Health Nutrition (IPHN) in the Directorate General of Health Services (DGHS), and the Information, Education and Motivation (IEM) Unit of the Directorate General of Family Planning (DGFP) – to assess their own capacity periodically using the same tool.

BKMI focuses its capacity strengthening work at three levels: improving the knowledge and skills of individuals who work in the three SBCC units of MoHFW, developing tools and establishing processes within the units to strengthen organizational capacity, and working to optimize coordination of SBCC activities and integration of health, nutrition and family planning topics at the system level. To facilitate its capacity strengthening work, three senior communication specialists are embedded within the three SBCC units to provide day-to-day mentoring and hands-on support.

Challenges

A majority of the challenges identified by BKMI were at the system level, including:

- SBCC materials not aligned with current government policy;
- insufficient coordination, resulting in unintended duplication of SBCC materials and activities;
- either the lack of SBCC materials available for field workers, or an abundance of SBCC materials that were heavy and difficult to carry; and
- insufficient training opportunities available to field workers.

In addition, SBCC activities were “siloed” by the three MoHFW units. Although a cadre of 18,000 Health Assistants were responsible for health SBCC in communities and 23,000 Family Welfare Assistants were responsible for family planning and reproductive health SBCC in communities, the two cadres were not cross-trained, and neither were responsible for nutrition before their job descriptions were revised in 2014.

Supporting Field Workers

To address these system-level challenges, BKMI worked with the MoHFW and the Behavior Change Communication (BCC) Working Group – a community of practice of SBCC practitioners in Bangladesh from government, non-government (NGO), private and development partner and other organizations – to develop an eToolkit for Field Workers.

The eToolkit is a digital library of print and audio-visual SBCC materials presented in a simple graphic format, organized by topics and sub-topics. The eToolkit was designed to be user-friendly for people who are not highly computer literate.

All of the materials have been reviewed at two levels: first, by subject-matter experts to ensure technical accuracy and harmonization with government policy; and second, by field workers who were asked, “Would you use this item when counseling a client?”

The eToolkit facilitates counseling by providing visual aids, by strengthening and reinforcing field workers’ knowledge and by motivating clients to ask more questions. Importantly, the eToolkit provides a full range of information on health, nutrition and family planning, which means any field worker with access to the eToolkit can assist clients regardless of whether or not they have been trained on a particular topic.

Piloting the eToolkit

A pilot study of the eToolkit, conducted from May to August 2013, found that using the eToolkit increased field worker credibility as the first point of contact for information on general health (from 18 to 59 percent),
family planning (from 38 to 54 percent) and nutrition (from 29 to 50 percent). This increase in credibility is of special importance as the category of “field workers” included both Family Welfare Assistants and Health Assistants.

Figure 1: Percent increase in field worker credibility in health, family planning and nutrition as rated by mothers of children under two years old in two districts in Bangladesh

Following the successful pilot in the Sylhet and Chittagong districts, BKMI began working with the MoHFW, NGOs and private-sector organizations to support cadres of field workers to scale up the use of the eToolkit nationwide, thanks to a timely investment in information and communication technology (ICT) infrastructure by MoHFW and others.

In 2014, the DGHS of the MoHFW purchased 24,000 Android™ tablets for all Health Assistants and their supervisors. As of 2016, more than 13,000 Community Clinics and 240 Family Welfare Centers of the MoHFW are equipped with laptop or desktop computers and modems.

The NGO Health Service Delivery Project (NHSDP), the largest NGO network of health-service facilities, has 388 clinics throughout the 64 districts of Bangladesh. Each of the clinics has a laptop they can use to show the eToolkit. Most clinics also have a television with an USB portal on which they can show the videos.

At the same time, smart phones have become accessible to more of the population as prices for certain models have fallen to around $30 or $40 USD.

The eToolkit is available in three formats:

- **Online** – for those with access to any desktop or laptop computer and an internet connection (http://etoolkits.dghs.gov.bd/bangladesh-toolkits)
- **Offline** – for those with access to a Windows™ desktop or laptop computer, but who do not have a reliable internet signal; the offline files can be downloaded at http://etoolkits.dghs.gov.bd/bangladesh-toolkits

- **Mobile app** – for those with an Android smart phone or tablet (BD HPN Toolkit in Google Play Store); a 3G or wifi signal is needed to download files initially, but is not necessary for ongoing use of the app

The eToolkit is updated annually by a sub-group of the BCC Working Group. With each update, the sub-group facilitates the two-level review process, and removes any materials that are redundant. In order to make the eToolkit easy to navigate, the sub-group prioritizes the quality of materials over the quantity of materials. Each year the sub-group considers adding new sub-topics, if the content and interest are sufficient.

The sub-group includes representatives from the three MoHFW units responsible for SBCC, as well as other SBCC stakeholders who volunteer to work on the sub-group. The BCC Working Group is led by MoHFW, which plans to continue supporting sub-groups after BKMI ends in 2016.

The eToolkit helps to improve coordination of SBCC activities at the system level by consolidating the best SBCC counseling tools in one digital publicly-available location, making it possible for all stakeholders to easily see what has been produced, and thus helping to avoid unintentional duplication. In addition, all field workers throughout Bangladesh have access to a common package of high-quality SBCC counseling tools.

The eToolkit for Field Workers is an example of how capacity strengthening efforts for the MoHFW in Bangladesh spanned across all three levels in the SBCC Capacity Ecosystem:

- **At the individual level**, the eToolkit enables field workers to enhance their knowledge and skills.
- **At the organizational level**, the three MoHFW units responsible for SBCC are involved in updating the eToolkit every year. The process of updating the eToolkit provides an opportunity for the three units to examine all SBCC materials that have been produced, and identify gaps and opportunities the units may fill.

All essential information and communication materials the field workers need to influence their clients are gathered in this eToolkit. We want people to learn more about health and family planning. I hope that this pilot project will open doorways to new possibilities.

*Dr. S M Mustafizur Rahman, Program Manager, National Nutrition Services, MoHFW*
• At the system level, the eToolkit integrates health, nutrition and family planning topics, and facilitates coordination by compiling high-quality counseling tools for field workers in one place.

In addition, the eToolkit strengthens the health system because it is designed to be taken to scale in a country with a large cadre of both government and non-government field workers.

What Worked Well

• The multi-level challenges – starting with the system, as revealed by the assessment – in capacity required creative thinking, which resulted in the development of the eToolkit.

• Field workers easily learned how to navigate and use the eToolkit with some training and guidance.

• The pilot demonstrated that the eToolkit could be an effective counseling tool and well-accepted by both field workers and clients.

• In 2014, the DGHS decided to invest in tablets for all of its field workers, which created an opportunity for scale-up that would not have been otherwise possible.

• To ensure sustainability and local ownership, the DGHS took over hosting the eToolkit on its server.

• A sub-group of the BCC Working Group reviews and updates the eToolkit content each year.

Lessons Learned

• Technology can also present some challenges: two years after DGHS’ investment, many of the tablets were not in service. As a result, BKMI had to prioritize working with known existing ICT infrastructure, such as the laptops in more than 13,000 Community Clinics and the computers in the 240 Family Welfare Centers.

• Investing in ICT infrastructure was beyond the scope of the BKMI project. Rather, BKMI had to rely on existing computers and mobile devices within MoHFW and advocate for the further investment in mobile devices, including field-based technical support, supervision and training on how to use both the devices and the software.

• To address challenges in ICT infrastructure, BKMI made the eToolkit available in three formats so field workers could access it with or without an internet connection, using a desktop or laptop computer or mobile device. However, the trade-off is that it is not possible to accurately monitor the dissemination and use of the offline and app versions.

• To achieve true sustainability, MoHFW will need to take over promotion and dissemination of the eToolkit; field-worker training; trouble shooting and tech support; and the annual content updates, which can be accomplished in four to five months with the support of the BCC Working Group.

• Taking the eToolkit – or any technology – to scale takes time and may not follow a linear process. Often, software is being developed before or at the same time as investments in ICT infrastructure are being made. Achieving synchronicity between hardware and software is extremely difficult. Compromises in quality sometimes need to be made to achieve scale, or compromises in scale need to be made to retain quality.

Next Steps

The MoHFW’s commitment to the use of technology to support the field workers is to be applauded. However, in order to maximize the impact of their increasing investment in technology – like tablets and computers for field workers – they also must strategically invest in the following related areas:

Rafiq Miah, Health Assistant in Sylhet, uses the eToolkit
• Procurement process that defines the minimum specifications needed – space available, robustness and quality – to accommodate existing tools with room for some expansion as new tools are developed;
• Training that goes with the equipment so field workers have the minimum required skills to use the tablets;
• Supervision to ensure the field workers are using the tablets optimally and flagging any concerns or challenges that arise; and
• Trouble shooting and technical support to help field workers, in a timely way, with any problems they may face in using the equipment.

These steps can protect the MoHFW’s investment and improve effectiveness of these tools.

Conclusion

The evolution, use and adoption of the eToolkit required collective creative thinking. When non-traditional solutions were sought for traditional problems, the result was an innovative approach to strengthen the capacity of the SBCC system.

Long-term investments in building systems can result in sustainable impact when done in a collaborative manner, with a focus on impact and supporting local objectives and priorities. By changing the lens through which capacity strengthening is viewed and drawing upon innovative ways to assess and validate capacity strengthening outcomes, the MoHFW, partners and stakeholders were able to be innovative and bring technology to their aid.

Links

• eToolkit for Field Workers: http://etoolkits.dghs.gov.bd/bangladesh-toolkits
• BKMI eHealth Pilot Documentary:
  » Five minute video: https://www.youtube.com/watch?v=bckMHH4vgeo
  » Twelve minute video: https://www.youtube.com/watch?v=Ngy9w5YHkzk&feature=youtu.be
• BKMI project: http://healthcommcapacity.org/where-we-work/bangladesh/
• BCC Working Group: https://www.bdbccgroup.org
• CCP: http://ccp.jhu.edu/
• BCCP: http://www.bangladesh-ccp.org

The eToolkit has made my work more efficient. Now I can learn things more easily than before. I know more about health and nutrition than ever before, and now I can also counsel others.

Previously, clients were not very interested in learning. Now they are curious. They call me even when I walk by and ask to see more from this eToolkit. There are many advantages to using the eToolkit, such as getting updated information on health, family planning and nutrition, and being able to share it with others as well. Sometimes, it takes a while to open big files. My clients are more interested to see videos rather than photos.

Every day, many people in the community come to me for all kinds of health information. I hope other field workers like me are also doing their best to fulfill the needs of the people by using the eToolkit.

The eToolkit for Field Worker has enabled Kawsar Akhter to better meet her clients’ needs.

Kawsar Akhter, Family Welfare Assistant, Kanchonabad Union, Chandanaish Upazila, Chittagong District
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After using the eToolkit, interest among the field workers has increased. Their service-provision skills have also improved a lot. With the eToolkit, they can provide counseling to clients more easily. We hope this will bring development to our next endeavor and to the health department.

Md. Abdul Waheed Akanda, Chief, Bureau of Health Education and Line Director, Health Education & Promotion, MoHFW