Designing evidence-based communications programmes to promote handwashing with soap in Vietnam

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Since 2006, the Vietnam Ministry of Health and the Vietnam Women’s Union, with support from the World Bank’s Water and Sanitation Programme (WSP), have been carrying out a behaviour change communications programme to promote handwashing with soap among women and primary schoolchildren with the objective of reducing the incidence of diarrhoeal diseases in children under five. In developing communications campaigns for both groups, the same process was employed, including: use of a framework to analyse research findings; design of campaign concepts for pre-testing and adjustment; production and implementation of communications activities; and development of a monitoring system. This process resulted in complementary campaigns: one for carers and an education-entertainment campaign for children that uses a cartoon series to promote handwashing with soap. The paper concludes with practical recommendations for programme managers of behaviour change programmes and includes examples of the communications materials developed for the Vietnam Handwashing Initiative.

Keywords: handwashing with soap, behaviour-change communications, hygiene promotion, Vietnam, evidence-based communications

ALTHOUGH VIETNAM HAS EXPERIENCED RAPID economic growth within the last 10 years and is now positioned to achieve the Millennium Development Goals for water supply, progress towards the targets for sanitation and hygiene lag behind. In 2006, the Ministry of Health estimated that only 18 per cent of households in Vietnam had access to hygienic latrines (Department of Preventive Medicine and Environmental Health, 2006). The country has suffered from reoccurring outbreaks of severe acute respiratory syndrome, avian flu, cholera and, most recently, H1N1. Handwashing with soap (HWWS) has been proven to reduce the incidence of diarrhoea by up to 47 per cent and acute respiratory infections by up to 34 per cent (Curtis and Cairncross, 2003; Luby et al., 2005).
While most water and sanitation projects in Vietnam include a hygiene component, competing demands, lack of interest and insufficient experience in developing behaviour change campaigns results in materials that have been simply cut and pasted from previous communications materials rather than developed based on formative research findings. In addition, the majority of communications materials promoting improved hygiene focus mainly on improving knowledge and rely heavily on the threat of disease to motivate changes in behaviour.

Given these recent epidemics and the need to improve the way hygiene promotion has been carried out in Vietnam, there is an immediate as well as a long-term need for development of behaviour change communications initiatives that move audiences beyond knowledge towards adopting and maintaining new behaviours that emphasize the benefits of improved hygiene rather than the threat of childhood illnesses. This would allow beneficiaries to reap the full health benefits of investments in water and sanitation infrastructure.

**Project objective**

The Vietnam Handwashing Initiative aims to reduce morbidity and mortality in children under five through a communications programme to promote handwashing with soap among carers of children under five and among primary schoolchildren. Vietnam is one of four countries within WSP’s Global Scaling Up Handwashing Project funded by the Bill & Melinda Gates Foundation, which focuses on learning how to apply innovative promotional approaches to behaviour change to generate widespread and sustained improvements in handwashing with soap, at scale, among women of reproductive ages 15–49 and primary children ages 6–10. The project is currently being implemented in Peru, Senegal, Tanzania and Vietnam by local and national governments with technical support from WSP. For more information, please visit www.wsp.org/scalinguphandwashing. In Vietnam, the programme is supported by the Ministry of Health and Ministry of Education and Training; the main implementing partner is the Vietnam Women’s Union (VWU), a mass organization. Mass organizations were formed by the Vietnamese government to help communicate messages to the people about government policies. The VWU has representatives at the national, provincial, district and commune levels that organize activities for over 30,000 members (mostly women aged 18–49) present in every village throughout Vietnam. The organization carries out a variety of initiatives targeting women and is a key implementing agency for both government and donor programmes because of its strength at the grassroots level in mobilizing women’s participation.
To assist adults and children to develop improved hygiene habits, the Vietnam Handwashing Initiative developed two complementary communications campaigns targeting carers of children under five (primarily mothers but also grandparents) and primary schoolchildren. The campaigns integrate:

- national mass media;
- community-based interpersonal communications activities via Women's Union members, teachers and health workers;
- high-impact community marketing events; and
- public relations and advocacy aimed at national policy makers.

**Campaign development process for the carer's programme**

The process of developing both campaigns included the following steps: 1) audience research; 2) development of a behaviour change framework to analyse research findings, guide the formation of the communication campaign and track changes in behavioural determinants throughout the life of the project; 3) development of the creative approach including messages and tactics; 4) pre-testing and adjustments of the messages based on audience feedback; and 5) production of materials and roll out of the activities.

The Vietnam Handwashing Initiative began in January 2006 and the first activity undertaken was a formative research study to understand the barriers and motivations to HWWS and to determine the best channels of communications for carers of children under five in rural Vietnam. The study was completed in early 2007 and in early 2008 a behaviour change framework was developed that identified the barriers to HWWS that could be addressed through a communications campaign. The process resulted in the development of a campaign brand and logo, several media products and a comprehensive training module and materials for interpersonal communication activities between health workers and Women's Union members and carers.

The campaign was launched by the Ministry of Health, along with a number of other partner institutions, in June 2008. In 2009, the project began the process of developing a children's programme that utilized the same process that was used to develop the programme for carers. The section below provides additional details of each programme, including activities completed to date.

**Audience research**

Research objectives. Investigate handwashing behaviours among mothers of children under five; examine availability of sanitation, water
and soap products in and around households; understand motivating factors and barriers to HWWS at critical junctures (after contact with faeces, before contact with food); and document channels of communication.

The methods used were:

• focus group discussions with carers;
• in-depth interviews with carers;
• surveys with carers to examine access to water, sanitation and soap in households;
• structured observations within households to observe actual HWWS rates; and
• product trials where carers were provided with soap for use within a week followed by an in-depth interview.

Summary of research findings and recommendations:

• 92 per cent of carers reported washing hands at critical junctures – but only with water;
• 60 per cent of carers who washed their hands did not feel that soap was important or necessary;
• only 9 per cent of carers were observed to wash their hands with soap before feeding a child;
• 73 per cent of mothers were observed to wash hands with soap if the source of soap was nearby whereas only 27 per cent of mothers were observed to wash their hands with soap if the soap was distant from the water source;
• carers were most concerned with ensuring that their children meet developmental milestones so that they are able to keep up with their peers;
• smell is the most salient product attribute of soap;
• many carers reported that 'soap was too expensive', yet most households had at least one type of soap;
• television is the best way to reach carers, but Women’s Union members and health workers are the most trusted sources of information.

A communications strategy should address the fatalistic acceptance of illness (and low perceived risk) and should dissolve the notion that germs and dirt must be visible to be harmful.

**Developing a behaviour change framework**

To design a programme that effectively changes HWWS behaviour, it is critical to understand why carers do not, or cannot, wash their hands with soap. In many programmes, a behaviour change framework is used to guide the development of the research questions. However,
Factors that can facilitate or hinder HWWS behaviour, include access to soap or beliefs regarding the cause of diarrhoea when the formative research study was completed in Vietnam, there was no pre-existing framework for HWWS. WSP developed a framework titled FOAM (see Figure 1) to help guide WSP programme staff in the four focus countries in designing and monitoring their handwashing communications programmes. The framework provided a way to analyse the determinants, or factors that can facilitate or hinder HWWS behaviour, such as access to soap, beliefs regarding the cause of diarrhoea, or knowledge of the link between HWWS and diarrhoea. FOAM stands for:

- **Focus**: who are the target audiences and what is the behaviour we want them to adopt?
- **Opportunity**: is the target audience able to carry out the behaviour?
- **Ability**: is the target audience capable of carrying out the behaviour?
- **Motivation**: does the target audience want to carry out the behaviour? (Coombes and Devine, 2009)

After analysing the research findings in Vietnam using the FOAM framework, several behavioural determinants that could be addressed via a communications campaign, for example knowledge and beliefs, were selected to be addressed in such a campaign. Because the formative research questions were not driven by FOAM, organizing and prioritizing the research findings as well as developing the agency brief was a challenging and somewhat lengthy process. Several communications experts were consulted and over nine drafts of the creative brief were produced before selecting the key determinants.

Following the campaign, carers of children under five in rural areas of Vietnam will:

- know that even clean-looking and clean-smelling hands can have germs;

![Figure 1. The FOAM behaviour change framework](image-url)
The objective of the Handwashing Initiative is to reduce and measure the incidence of diarrhoea in children under five.

- believe that handwashing with water alone is not enough – soap is needed;
- be reminded to wash their hands with soap at four critical junctures (before preparing food, before feeding children, after using the latrine and after cleaning a baby’s bottom). The objective of the Handwashing Initiative is to reduce and measure the incidence of diarrhoea in children under five, thus, the programme does not focus on the before eating juncture for adults; and
- feel empowered that HWWS is something they can do to ensure the well-being of their children.

**Campaign development**

Based on the HWWS formative research findings, as well as other consumer research studies on mothers in Vietnam, which confirmed the top priority for Vietnamese mothers was caring for their children, a campaign was developed based on the idea of promoting ‘good motherhood’. Using this platform, six campaign concepts were developed and pre-tested throughout the country. The final image of the mother and her two children protected by a soap bubble was chosen for its association with cleanliness, protection and handwashing in Vietnam. Originally, the bubble image was developed with the idea of ‘pure love’ (purity is a theme that is often used in advertising in South Asia); however, the idea was too abstract for the Ministry of Health and other partners of the HWI. The bubble image was pre-tested because of its appeal; however, the image was coupled with a popular Vietnamese song ‘Five Clean Fingers’ often sung by mothers and teachers when teaching young children how to count. The campaign uses the song to point out that, ‘Hands are not clean if you wash only with water, soap is needed’.

The final products for the campaign included two television commercials, two posters and a logo that included the tagline, ‘Wash your hands with soap for the health and development of children’. The words ‘health and development’ were chosen after in-depth discussions with the target audiences to select the word(s) most closely associated with the benefits of handwashing with soap. Mothers said that they were most concerned about their children being able to keep up with their peers both physically and mentally. In order to develop properly, children need to be healthy. HWWS was positioned as an easy way for mothers to help ensure the health and well-being of their children. The process of developing the final materials took over six months from campaign inception to the development of the final products. This was, in part, due to the highly participatory process that WSP facilitated with its public and private partners to ensure ownership and government endorsement of the materials.
A series of high-impact community marketing events were also held to reinforce the positive messages about HWWS through games, quizzes, contests and glo-germ demonstrations to illustrate that clean looking hands can still have germs. The glo-germ demonstration involves participants rubbing a powder, detectable only under ultraviolet light, on their hands. Because the powder is invisible to the naked eye, the hands still appear to be clean. When participants put their hands under an ultraviolet light they see that the powder still remains and can only be completely washed off when hands are washed with soap. In addition, a comprehensive interpersonal communications manual was developed for health workers and Vietnam Women’s Union members to use in leading group meetings with mothers, grandparents and teachers, conducting household visits and organizing market meetings, club meetings and community contests.

**Activities completed to date**

In total, over 1.2 million people have been reached through interpersonal communications activities alone from May 2008 to May 2010 via health workers and Vietnam Women’s Union members. The activities included:

- 12,000 health workers, teachers and Vietnam Women’s Union members trained in HWWS;
- 6,500 mothers meetings;
- 4,000 grandparents meetings;
- 200,000 household visits;
- 500 market meetings;
- 280 VWU club meetings;
- 634 teacher meetings;
- 10 community marketing events; and
- 48 cooking contests.

During Phase II of the programme (June 2009–October 2010) it is expected that an additional 28 million more people will be reached through the Vietnam Women’s Union activities via interpersonal communications activities combined with mass media and community marketing events.

**Campaign development process for the children’s programme**

The development of the children’s campaign began in January 2009 and followed the same process that was used in developing the carer’s programme. The process and outputs from each step are highlighted below.
Research objectives. Understand the school context within which handwashing promotion will take place, including social dynamics, roles and responsibilities of staff members; a typical school day and access to water, sanitation and soap; and gain insight into the minds and realities of children aged 6–10 to better understand the barriers to and motivations for washing hands with soap.

The methods used were:

- in-depth interviews and focus group discussions with headmasters, teachers and carers;
- daily diaries to uncover what children do from morning to evening;
- family structure diagrams to understand who children are closest to, spend the most time with, fear most, etc.;
- use pictures and stories about handwashing to uncover children’s motivations to wash their hands with soap;
- discuss role models and future careers to understand who children admire and what children want to do when they grow up.

Summary of research findings and recommendations:

- Children know that they need to wash their hands with soap but do not know when.
- Smell is the most salient product attribute of soap.
- The desire to prevent others, especially younger siblings, from getting sick is a leading emotional motivator for HWWS.
- The Ho Chi Minh’s Pioneers’ Union represents a desirable group to belong to. They meet before class once a week to organize extracurricular activities and are led by one teacher from each school.
- Role models reflect greater societal values: education, hard work and altruism.
- School days are long and highly regimented with limited opportunities for play.
- Access to soap (and sometimes water and sanitation) is very limited at schools.
- Management of soap is also a major challenge in schools with HWWS facilities.
- Teachers have a full workload and HWWS is already part of the curriculum.
- In addition, hygiene lessons are often limited to theory as a lack of facilities prevents children from practising HWWS at schools.
- The most likely opportunity to handwash with soap in schools is after using the latrine, as almost all rural schoolchildren return home to eat their midday meal.
- TV is a child’s window to the wider society.
Developing a behaviour change framework

As with the mother’s programme, there was no pre-existing behaviour change framework to guide the development and analysis of formative research on children and HWWS. Determinants that were applicable for both children and adults (rectangular boxes in Figure 2), such as access to water and knowledge, were taken from FOAM. These determinants overlapped with the socioecological model which recognizes the influence of relationships between an individual and his or her environment, including within the family, at school and in society at large (ovals in Figure 2), and were combined to form FOAM EM (FOAM Ecological Model) (Stokols, 1996).

After analysing the research findings in Vietnam using the FOAM EM framework, several behavioural determinants were selected to be addressed in the communication campaign. Following the campaign, children aged 6-10 in semi-urban and rural schools will:

- know that even clean-looking and clean-smelling hands can have germs;
- believe that handwashing with water alone is not enough – soap is needed;
- believe that HWWS is an important behaviour to demonstrate in front of peers and family because it will protect themselves, their family and friends;
- be reminded to wash their hands with soap at two critical times (before eating and after using the latrine);
- be motivated and feel excited about HWWS and want to practise HWWS.

Figure 2. FOAM EM behaviour change framework for children


Campaign development

The research findings from the HWWS study with children revealed that altruism is highly valued by children as well as the desire to protect their younger siblings from illness. Thus, the campaign for children was developed based on the platform of children as the ‘pride of the family’. HWWS was positioned as an easy, fun and smart behaviour with a tagline of ‘Wash your hands with soap for your own health and the health of others around you.’

As Vietnamese children have little free time in their daily lives, WSP supported its partners to work with an advertising agency to develop a programme that was based on an entertainment/education approach to generate interest, enthusiasm and promote the practice of HWWS. As a result, a campaign focused on colourful, attractive and positive characters was developed around a superhero who acquires special powers by handwashing with soap in order to help his family and others. Of the two concepts, one depicted a fictional cartoon rabbit character and another was a more realistic depiction of rural school boy, Bi, who becomes a superhero. The character of Bi was more acceptable among children, and was further refined and pre-tested again several times before the final production.

Rather than a top-down education approach, the interactive campaign combined mass media and interpersonal communications activities, including a series of 10 cartoon animations printed in the weekly national children’s magazine Nhi Dong beginning in September 2009 and to be aired on a popular nightly children’s television show Good Night Baby beginning in March 2010. In addition, popular children’s games were modified for use in schools along with singing of the ‘Five Clean Fingers’ song used in the carer’s programme. Simple guidelines and an instructional DVD were created for training teachers in the application of the games as a supplement to existing lessons on HWWS. Each school within the supported programme areas will carry out five extracurricular activities throughout the year including participation in a national HWWS drawing contest through the Nhi Dong magazine.

Activities completed to date

HWWS promotion activities have been carried out in 512 rural and semi-urban schools throughout Vietnam and these activities will continue through May 2010. Activities completed thus far have reached over 205,000 primary schoolchildren and include:

- training for over 670 teachers;
- 512 Global Handwashing Day school events;
- 260 ‘My Superhero’ contests;
- 512 school HWWS launch events.
To address the challenge of insufficient access to handwashing facilities at schools, guidance on developing low-cost HWWS stations are provided to teachers and headmasters during the training courses mentioned above. Rather than waiting for large-scale investments to improve their water and sanitation facilities, teachers, headmasters or the parents associations can purchase plastic buckets and plastic water dippers which are affordable and available for purchase anywhere in Vietnam for immediate application of HWWS in schools. Teachers are advised to put soap bars inside porous fabrics such as mesh so that the soap remains inside a container at all times and can be more easily managed.

**Lessons learned and recommendations**

Several of the key lessons learned thus far have to do with ensuring the high quality of the design and implementation of a behaviour change communications campaign. To capitalize on the private sector’s experience in designing appealing advertising campaigns, under the Vietnam Handwashing Initiative, a market research firm was hired to carry out the adult formative research study and an international advertising agency was contracted to design both communications campaigns. Although both firms had significant experience in these respective areas, they still required a significant amount of oversight and management from WSP and its partners. Below are the main lessons learned and recommendations that may be helpful for programme managers in developing behaviour change programmes.

**Consumer research**

Policy makers and programme managers are often under pressure to quickly roll out a communications campaign, especially if they are stretched in terms of time or financial resources and, thus, may be tempted to skip or shortcut the consumer research stage. However, based on our experience in Vietnam, this first step is the most crucial in designing an evidence-based campaign as the research findings are critical to identifying behavioural determinants which subsequently guide the development of the communications campaign objectives. The campaign objectives will then be used as the basis for a monitoring and evaluation system.

Because behaviour change communications programmes need to extend beyond simply changing consumer brand preferences, research agencies need to develop detailed research tools to uncover the individual, familial and larger societal factors that may constrain HWWS, including knowing the distance, on average, between the latrine and the handwashing area, understanding who within the household
(mother or father) can buy soap, who is in charge of or manages soap in households and schools (adults or children), and so on.

**Campaign development and pre-testing**

Advertising agencies do not always base their creative ideas on evidence and research data. Although WSP provided the advertising agency with a brief that included the full adults and children's research reports, as well as guidelines for the firm, the creative ideas that were developed were in many cases not consistent with what was provided in the guidelines. Although the creative ideas were visually appealing, WSP and its partners often had to refer the firm back to the agency brief and research studies to ensure that the creative ideas reflected the research findings. The agency brief serves as an important tool to guide and measure the creative ideas of the agency. Although a creative concept may be very attractive, if it does not reflect the requirements of the brief, it should be sent back to the agency. It is important to stipulate in the agency brief exactly what the agency will be measured against and then to hold the firm accountable.

During pre-testing, it is crucial to pre-test at least two different campaign concepts to ensure that audiences are provided with a chance to respond to alternative concepts rather than commenting on variations of the same concept. Ideally, there should be at least two rounds of pre-testing. The first round helps to determine which concept to further develop and the second round is used to fine-tune the concept, including phrasing, layout and colour, although we had to carry out at least three rounds of pre-testing in developing each of the above campaigns.

**Conclusion**

WSP's experience in supporting the Ministry of Health and the Vietnam Women's Union to implement the Vietnam Handwashing Initiative has demonstrated that there is a need and demand for behaviour change communications using multiple channels to improve hygiene in Vietnam. The health and education ministries have endorsed all communications products developed by the initiative, and teachers and school administrators have been particularly keen to include within their schools the informal and participatory games developed for children. In addition to national institutions, WSP has responded to requests for support from provincial health and education departments as well as from several World Bank investment projects in water and sanitation to integrate HWWS into their existing programmes. Most recently, in December 2009, the Vietnam Women's Union signed a Memorandum of Understanding with the
Vietnam is part of a global project to test whether innovative behaviour change programmes can increase handwashing with soap rates at scale. The programmes in Tanzania, Senegal and Peru have used the same evidence-based approach in designing and implementing their programmes; however, given the different context within each country – Vietnam is a highly centralized country whereas Tanzania is undergoing significant decentralization – the programmes have evolved very differently.

Looking ahead, we anticipate seeing increases in HWWS rates and hope to quantify the health impact of the behaviour change once the final impact evaluation has been completed in late 2010. The impact evaluation aims to address the following research questions and associated hypotheses:

1. What is the effect of handwashing promotion on handwashing behaviour?
2. What is the effect of handwashing promotion on health and welfare?
3. What are the conditions under which the handwashing promotion strategies are most effective in achieving desired outcomes?
4. Which promotion strategies are more cost-effective in achieving the desired outcomes?

References


