

Using PHAST for in-country disease outbreaks response

UGANDA RED CROSS EMERGENCY RESPONSE DURING THE CHOLERA OUTBREAK

Western Uganda (Hoima, Bundibugyo and Kibale Districts), June 2006.

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BACKGROUND

IFRC has over the years implemented WatSan programs with national societies as a response to emergencies and as a strategy towards disaster preparedness. Introducing PHAST in Eastern Africa in 1999 as a community management disaster tool has showed that when a disaster occur those Red Cross / Red Crescent National Societies that have been working on participatory methodologies as part of the emergency prevention and preparedness are able to introduce the participative elements in the response efficiently since the very beginning.

Uganda Red Cross was one of the pioneer organizations to implement Primary Health Care in 1981 and adopted PHAST (Participatory Hygiene and Sanitation Transformation) strategy in 2000 within a total of 4 pilot branches and later expanding to 12 branches: South Western Uganda, Central region-Kampala East and Kampala South, Northern Uganda mainly IDP (Internal Displaced People) camps and in the Refugee hosting communities in the Western and West Nile regions of the country.

The target groups have been peri-urban, rural communities, refugees and IDP's. Currently Water and Sanitation is a fully-fledged health component of the Health and Care programme in which PHAST is a very big and integral portion of Watsan component taking about 50% of the component budget.

In May 2002 in response to a growing concern about the implementation of PHAST by National Societies in the East Africa region the IFRC Regional Delegation in Nairobi produced a concept paper for hygiene promotion in emergencies, '*When PHAST needs to be FAST*'.

In 2003, the first PHAST review in Kampala, Uganda, examined whether PHAST could successfully be shortened in emergency without losing its impact and the community 'buy-in' seen to be so essential to its successful implementation. New guidelines were produced for shortening the PHAST process during an *emergency* and also specifically during a *cholera epidemic*.

PHAST steps in cholera response

Assumptions: The NS has been implementing PHAST before the emergency situation and has volunteers already trained in PHAST methodology and PHAST toolkits developed.

Timeframe: PHAST should be initiated within two weeks of the arrival of refugees (population displacement across borders) for a period of implementation of 8 weeks. PHAST session might be undertaken in a period of 1 week depending of the nature of each emergency and the access to

the affected population. Following the implementation of the PHAST sessions, the team might be focused in community management of the facilities and dissemination of hygiene messages.

It is recommended that during the acute phase of emergencies the PHAST process should be shortened as follows:

Step	Activity	Tool(s)	Purpose	Timeframe
2	Community mapping	Community mapping	In-depth analysis of the disease outbreak & its cause	Day 1: 1-1 ½ hours session
	Good & bad hygiene behaviour	3-pile sorting		Day 1: 1-2 hours sessions / group.
	How disease spreads	Transmission routes		Day 1: 1-1 ½ hours session
3	Blocking the spread of disease	Blocking the routes	To analyze for possible solutions to identified causes of problems	Day 2: 30 min – 1 hour
	Selecting the barriers	Barriers matrix		Day 2: 30 min – 1 hour
4	Choosing improved hygiene behaviour	3-pile sorting	To identify key messages for improved behaviour hygiene	Day 3: 1 hour
6	Preparing to check our progress	Monitoring chart	To monitor according to agreed standards	Day 4: 2 hours

Activities removed from the standard PHAST process:

- § Community stories
- § Health Problems in our community
- § Investigating community practices
- § Tasks for men and women
- § Choosing improved water and sanitation activities
- § Taking time for questions
- § Planning for change
- § Planning who does what
- § Identifying what may go wrong
- § Checking our progress

After the emergency phase of the disease outbreak, the community can be taken through the PHAST process as in a developmental/post relief phase.

Case study

Uganda Red Cross emergency response during the cholera outbreak; Western Uganda (Hoima, Bundibugyo and Kibale districts) June 2006

An outbreak of cholera was confirmed in Hoima, Bundibugyo and Kibale Districts in Western Uganda. Lack of sanitation facilities and safe water, unsafe cultural beliefs of these communities, cross border population movement and 'cholera fatigue' among donors have been cited as main challenges in responding to cholera outbreak in Uganda.

A more detailed study revealed the following factors being responsible the frequent outbreaks of cholera in these areas:

- High illiteracy rate in the area to a tune of 41%.
- 56% of the population does not have a reliable income meaning that they are living hand-to-mouth.
- There are many tribes in the study area; at least 15 tribes were realized during the study, with varied cultures some of which negatively affect hygiene behaviour to the detriment of the residents.
- The majority of the people (90%) had very scattered information regarding the transmission of cholera.
- Only 10% of the respondents could adequately articulate the transmission routes of cholera and suggest barriers to such routes.
- 54% of respondents could correctly mention the key signs and symptoms of cholera meaning that the knowledge level on cholera is low.
- 18% of the households had latrines/toilets in their homes but of varying quality standards. None of these had latrine covers, and only 25% of these were clean, while the rest were dirty (mainly soiled walls and upswept/wet floors).
- 18.0% of the latrines / toilets visited had hand-washing facilities fitted on or near them. The rest (82%) of the respondents did not have hand-washing facilities fitted near their latrines / toilets.
- 60% of the population gets water from unsafe sources, namely the lake and open / unprotected shallow wells / water holes.
- 48% of the populations consume water in its raw form. 29% don't cover the storage facility for drinking water and some members of the community directly drink from the storage container which increases the rate of water contamination especially when some of the water gets back into the container.
- 30% of respondents are located more than two kilometers away from the nearest water source which is too far to allow the affected households to use enough water, especially for washing their hands at critical moments.

- When cholera is detected most people (68%) seek health care from health units, but the proportion which seeks care from unreliable sources is huge enough to cause worry¹.

In 2006, there were reported 98 reported cases of cholera and 33 deaths. Since this was a situation beyond the ability of Uganda Red Cross they applied for Disaster Response Emergency Funding (DREF) in which the Uganda Red Cross Society disaster management programme became the focal point for the implementation of the Cholera DREF response. The programme had NDRT (National Disaster Response Team) members who were all integrated into Red Cross Community Action Teams in 33 branches of the 49 branches with 15 radio based stations.

The Programme dealt with both preparedness and response activities. These included:

1. Setting out response mechanisms at community level (Community based action teams). These included creation of multidisciplinary committees at district/branch level which were meeting on daily basis.
2. Equipping warehouse with Emergency stocks (Non – food items) and distributing the items as when need arose.
3. Awareness, education and development of IEC (Information, Education and Communication) materials on common disasters and some were given to volunteers in form of brochures and others in form of posters distributed to community leaders and displayed in public places.
4. Orientation drive of volunteers on the prevailing disaster and possible ways of curbing the situation.

As part of **Activity 3** ‘Shortened PHAST’ trainings were conducted targeting at least 100 volunteers. They were deployed in the affected communities and conducted 1 week - hygiene promotion sessions with the community action teams. The methodology used was 3 Step PHAST with focus areas in First Aid, cholera prevention and control and basic hygiene and sanitation promotion focusing in:

§ Step 1: Problem Identification

In this step the key activity undertaken by the Uganda Red Cross volunteers in the affected districts was to carry out a **rapid assessment** to determine the knowledge, skills and practices amongst households in relation to Cholera. Household observation visits and focus group discussions were conducted.

The purpose for this was to provide speedy collection of all relevant information related to risky hygiene behavior that could have a critical influence on the transmission of cholera.

§ Step 2: Immediate Response

There after based on the results of the rapid assessment the Uganda Red Cross society together with its National Disaster Response Team members from the affected districts proposed hygiene promotion training targeting the risky practices in the affected communities. A **shortened PHAST training** for 2 days as a core emergency response activity was proposed. The volunteers trained would then be expected to conduct community sensitization and door to door follow ups. Key hygiene messages were identified and a communication strategy devised. Each volunteer was to be assigned a minimum of 20 households to follow- up.

¹ Baseline survey data 2006

The communication strategy proposed was use of **household visits** whereby the volunteers would conduct PHAST sessions as follows:

Activity: Good & bad hygiene behaviour. Tool: 3 pile sorting.

This activity focused on the common health and hygiene problems. The tool used is 3 pile sorting as the problem analysis of good and bad hygiene behaviour. The drawings show bad and good hygiene behaviour as well as “in between” which are those activities which are neither good nor bad for health. Discussions focused on why the participants thought certain activities were either bad or good for health.

Activity: Investigating community practices- Tools: Pocket chart.

This activity assisted the groups to collect information and analysis information on individual hygiene and sanitation practices in the community. Examples include the use of latrine and hand washing behaviour after latrine use.

Activity: How diseases spread. Tools: Transmission routes.

In this activity the transmission mode of cholera was discussed using transmission routes tool.

Activity: Blocking the spread of diseases: Blocking the routes.

In this activity means of blocking the spread of cholera was discussed.

Additional to the household visits, the action teams carried out **massive hygiene campaigns:**

- Targeting community gatherings during cross border market days, religious and cultural meetings using megaphones and video tape shows.
- Posting posters and stickers in public places.
- Distributing hygiene publicity T shirts to the volunteers and community leaders.
- Disseminating key hygiene messages through Radio broadcasts. Five radio talk shows and 50 spots were aired in the local language.
- 6 schools in Bundibugyo district were targeted with hygiene behavior practices on proper hand washing and proper food and water handling and safety.

In linking up the hygiene promotion activities construction of latrine was undertaken. The communities were involved in choosing the design which was basically an improved pit latrine. The design was guided by cost and time factors. Local community artisans were directly involved in the actual construction the latrines.

§ Step 3 : Design and Monitoring and Evaluation

Simple hygiene behavior observation monitoring sheets were used by the volunteers during their weekly household visits. Examples of key indicators targeted:

<p>Safe Water</p> <ul style="list-style-type: none">- Access to a safe source of water for drinking (either from a safe source or disinfection of water)- Clean drinking water is stored in covered container.- Water supply system functional <p>Sanitation</p> <ul style="list-style-type: none">- Presence and proper use of latrines- Absence of children's faeces in courtyard- Presence of bathing facilities in the household- Hand washing at key times (after contact with faecal matter and before handling food)- Presence and use of dish rack- Presence of hand washing facility and Presence of soap or other cleaning agent <p>Household management of cholera and management at health units</p> <ul style="list-style-type: none">- Knowledge of ORT (oral dehydration therapy) - use of salt/sugar or ORS.- Number of cholera cases referred and attending health unit treatment.
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The monitoring by volunteers was done by administering the above observation checklist and on a weekly basis was compiling reports that had information on the above indicators. These reports were shared during weekly meetings that were attended by all the volunteers involved in the response, branch staff and headquarter staff that had been deployed to support the affected branches. In such meetings a way forward was developed to guide the next course of action of the emergency response. In addition the branch and headquarter staff were going down to the communities to participate in the community level meetings and also accompany the volunteers during home visits.

Results of the Emergency Operation

At least 5.335 households were reached during the door to door sensitization exercise with messages on the causes of cholera and its prevention and treatment.

Notable result of this emergency is that hygiene promotion awareness was created on the signs and symptoms of cholera. Sanitation coverage increased by 12% despite stability challenges and in Hoima district the local authorities went further to institute bylaws that aimed at household sanitation. This operation received wide coverage through the local radio station, reaching an estimated 700.000 people and as a result the image of the Bundibugyo and Hoima branches and Uganda Red Cross in particular were enhanced. Overall the disaster was contained as a result of the increased awareness on safe hygiene practices.

The details of the achievements as result of the initial one month emergency phase intervention include included:

- Raising the latrine coverage from the initial 18% (961 latrines in 5,335 households) to 30% (1,600 latrines) with increase of 12% (640 latrines) within the first month of the emergency response. This represents an average latrine increase at the rate of 160 per week. Some interventional activities continued even after the withdrawal of the emergency task force although at a low pace. It is therefore expected that latrine coverage continued to increase beyond 30% which had been attained by the end of the rigorous emergency interventional period.
- The above rigorous actions resulted in the rapid fall of cholera cases from 44 out of 10,000 people initially to 4 out of 10,000 people by the end of the intervention month, representing a recovery rate of 10 cases per 10,000 per week. Death rate dropped from 6 cases per week to 3 then 0 deaths per week. Cholera outbreak was contained within a short time span of 1 month.

Challenges during the Response

- Although pit latrine coverage improved by 12% the problem of the stability and functionality of these latrines remains a core issue. These are low lying areas where the water table is very high. Most areas are prone to flooding with highly permeable soils and the latrines constructed are prone to collapsing. The building materials for latrines like poles are very rear.
- Accessibility was a problem due to the rugged terrain in the Rwenzori region made access to the most vulnerable challenging given that the cholera affected areas were over 80 kilometers way from the branch office. The cross border movement between Democratic Republic of Congo and Uganda made it difficult to target the most vulnerable. These constraints were addressed through the use of a local radio station to create awareness on Cholera.
- Lack of other partners to intervene. Uganda Red Cross was the major actor on the ground working with minimal support from the government.
- Sustainability of the interventions (poor communities without any basic facilities provided) due to poverty levels.

Lessons Learnt

- In emergency context, community participation is crucial for ownership and empowerment of the affected communities to be responsible and motivated to seek solutions within their context and means. Thus participatory methodologies such as PHAST could be adapted to suit the emergency context.
- In an emergency, multifaceted communication channels have to be adapted in order to reach as many people within the shortest time period in order to save lives. PHAST members pass on messages to the rest of their communities (in their own homes, to neighbors, at community meetings, to relatives and at traditional gatherings). Megaphones and video shows could be used to pass hygiene messages in public gatherings. Publicity t-shirts can also be used and the radio plays an important role reaching very many people.
- Volunteer motivation and retention is crucial in dealing with volunteer fatigue. For this emergency the volunteers had to carry out intensive door – door sensitization for a considerable time. Equipment for volunteers should be available since they were

frequently involved in burying activities. Cholera kit should be considered when outbreaks occur in extended geographical areas with lack of health facilities, personnel and other actors. Training of volunteers in using cholera kit is an imperative.

- During the post-relief/development phase where water and sanitation hardware facilities are necessary it is recommended that the PHAST process should be undertaken as set out in the original standard guidelines for PHAST produced by the World Bank / UNDP. There is a need, however, to change the programming and facilitation of PHAST (rather than the content), as it is important to keep the tools themselves in tact and the order in which they are implemented.
- For sustainability of the interventions, linkages with Ministry of Health should be sustained to ensure continuous cholera outbreak surveillance and continuity of the hygiene promotion.
- A good monitoring and information sharing framework should be established amongst providers of WatSan services and health professionals in charge of case management.