



## CONFERENCE REPORT

# Focus on Handwashing

A one day event organised by the  
Hygiene Promotion Group

19th December 2012

London School of Hygiene and Tropical Medicine

## Acknowledgements

The Focus on Handwashing Event was organised by the Hygiene Promotion Group and was supported by Oxfam, International Federation of Red Cross and Red Crescent Societies (IFRC), International Rescue Committee (IRC), Action Contre La Faim (ACF), Médecins Sans Frontières (MSF), CARE International, the United Nations Refugee Agency (UNHCR) and the United Nations Children's Fund (UNICEF) and supported by the SHARE Research Consortium.



Presentations from the Focus on Handwashing Event are available to download at [www.shareresearch.org](http://www.shareresearch.org).

This report was produced by RedR UK, with support from SHARE Research Consortium.

SHARE stands for *Sanitation and Hygiene Applied Research for Equity*, and is a five year initiative (2010-2015) funded by the UK Department for International Development. SHARE is a consortium of five organisations that have come together to generate rigorous and relevant research for use in the field of sanitation and hygiene. Led by the London School of Hygiene and Tropical Medicine, SHARE includes the following partners: the International Centre for Diarrhoeal Disease Control, Bangladesh; the International Institute for Environment and Development; Slum/Shack Dwellers International; and, WaterAid.

SHARE works in two regions with historically low levels of sanitation access: sub-Saharan Africa and South Asia. And is conducting sustained research and 'research into use' programmes in four focus countries: India, Bangladesh, Malawi and Tanzania. Please visit our website at [www.SHAREresearch.org](http://www.SHAREresearch.org), or [contactshare@lshtm.ac.uk](mailto:contactshare@lshtm.ac.uk).



This material has been funded by UK aid from the Department for International Development (DFID). However, the views expressed do not necessarily reflect the Department's official policies.

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## First Session

### Welcome

*Marion O'Reilly, Public Health Promotion Team Leader, Oxfam GB*

### Super Amma: Promoting Handwashing with Soap in Rural India

*Adam Biran, LSHTM*

Adam Biran presented the work that he undertook with colleagues Val Curtis and Bob Aunger at LSHTM around promoting handwashing with soap in rural India through a fictional character, Super Amma. The work aimed to create an intervention that encouraged handwashing with soap at key times without using health messages or used mass media, and could be easily adopted into emergency programmes by using a small team that had limited contact time with affected communities.

The intervention used the character of Super Amma, a progressive rural mother who cares for her son by encouraging him to wash his hands at key times. The key elements of the approach were the use of an easily recognisable central figure (Super Amma), use of local role models, reinforcement of messages through cues and reminders and using nurture as the main driver of behaviour change.

The approach used the following elements to drive handwashing behaviour change:

- Plays for children: Featuring a disgusting figure who would not wash his hands and made meals with bugs and faeces, that Super Amma would show what he was doing wrong
- Animations: cinema events where the Super Amma film was shown (the full Super Amma film can be found at [www.choosesoap.org](http://www.choosesoap.org))
- Pledging ceremonies: playing on the idea of handwashing as a social norm, women from the community would pledge to wash their hands at key times and were given stickers to put on their doors to show their pledge to the rest of the community
- Reminders: such as stickers of Super Amma in key places like toilets and kitchens
- Work in Schools: The intervention staged workshops, games and handwashing ceremonies in schools

The intervention was initially planned to be conducted with a two person team using a motorbike for transportation, however, as the project went on, the team size increased to 4 and an SUV was used in place of a motorbike to transport the equipment.

Data was collected after the intervention using structured observation between the hours of 5:30 – 8:30am as most key times for handwashing could be observed between these hours. As measures of behaviour change, the study looked at the % of key events when hands are washed with soap, and % of all handwashes using soap. In areas that received the

intervention, the % of key events when hands were washed with soap increased by 19%, and % of all handwashes using soap rose by 18%, compared to minimal change in the control group for both measures. The study also found that normative beliefs had changed significantly in the intervention communities. Overall the study concluded that non-health messages could be used to successfully bring about behaviour change.

After the presentation, participants split into groups to discuss whether the intervention described by Dr. Biran could be used in the emergency context. The following key points, queries and comments came from these discussions:

- Do we still need to do some formative research initially to understand the context
- Methodology – 3 hours structured observation is not practical for emergencies, but independent observers is an interesting point. Could rapid observation work?
- Having control groups is difficult and raises ethical issues in emergencies.
- Nurture messages – families may be split in emergencies – would these still apply to extended families?
  - *Response from Dr. Biran: Social norms can be difficult for displaced communities in emergencies; there is less cohesion between neighbours so you are less likely to be swayed by what they do. In this study, the film was most effective emotional driver.*
- Social cohesion is sometimes broken or changed in emergencies, would this cause difficulties for changing social norms?
- Repeated and regular follow up would be important to see change
- Does the package need to be delivered as a whole, or can we extract key parts?
- It would be useful to have prepared materials on the various drivers e.g. children's report cards. Tailored materials are not always easy to create in emergencies (quickly).
- The type of emergency is an important factor; the process may be difficult to use in rapid onset emergencies, but easier perhaps in cyclical emergencies/slow onset/DRR
- This type of intervention needs to use appropriate messages from the offset; could questions be built into rapid assessments?
- Pledging ceremonies, could this process be dangerous without the right facilitators?
- Using this approach depends on access to facilities (both from the agency's and the beneficiaries perspective) – how would it be used if access was not the same as the study
- Could the film be adapted to emergency circumstances?
- Are there situations where health messages need to be used e.g. Cholera outbreaks?
  - *Response from Dr. Biran: There are some situations where health messages are absolutely needed e.g. the cholera outbreak in Haiti, but we shouldn't only rely on them, nor should we think that health messages and messages that seek an emotional reaction should be used exclusively of each other, we can look to integrate these two approaches together.*
- Are the drivers for behaviour change still the same in emergencies?
  - *Response from Dr. Biran: We could test the same drivers as used in Super Amma in an emergency, but we don't know whether they would be the same.*

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*It might be worth doing more qualitative studies to build a picture of what works in an emergency. The problem with this is that if health messages are used but don't work, donors and the sector accept that we tried, but if a very different approach is tried, there is more blame if it doesn't work. We need to experiment if standard approaches are not working. We need to see whether health messages or emotional drivers are more effective.*

- Timeframe was replicable for emergencies, but cost per person might be too high. Hygiene Promotion is usually under resourced/under budgeted in emergencies. \$1 per person may not be expensive if there is evidence of a good impact
- The school and community link was good and could be used in emergencies

## Second Session

### Debate: Locally Produced vs. Global Handwashing Kits

*Libertad Gonzalez, IFRC, Foyeke Tolani, Oxfam GB and William Carter, IFRC*

In this session, Foyeke Tolani (Oxfam GB) and William Carter (IFRC) led a simulated debate over which is better in emergencies; locally produced or globally produced handwashing kits. Foyeke was arguing the case for locally produced kits and William for global kits. Each speaker had three minutes to state their initial case, then two minutes to issue a rebuttal to their opponent's argument.

#### ***Foyeke Tolani (Oxfam GB): Arguing for local kits because:***

- They are easy to assemble in location of intervention
- They are appropriate in line with criteria for good handwashing
- They are relatively cheap and easy to use
- Culturally and religiously acceptable
- Tried and tested cross gender, generational and meets the needs of those with disabilities
- Not cumbersome, easy to use
- Example, tippy tap, used in lots of different contexts, is easy to set up and hands free
- They are green and use recycled materials
- They work at different levels, household and communal

#### ***William Carter (IFRC): Arguing for global kits because:***

- They can be pre-fabricated so you're not losing time in an emergency
- Prefabricated kits would make it easier to ensure every latrine in an emergency had a handwashing device
- Tippy taps made with bottles and string just don't cut it in an emergency
- Just because a kit is pre-fabricated, doesn't mean it can't be made locally
- Doesn't need to be global, it just needs to be pre-fabricated and made on mass in countries where it may be needed
- There are only two countries in the world that don't manufacture Coca Cola – we could make it the same with a pre-fabricated handwashing device so they are pre-positioned
- We need constructive criticism on what has been done in the past so we can make something suitable

#### ***Foyeke's rebuttal:***

- Local are the most effective in terms of cost and usability
- Global kits for other things are not always easy to assemble
- Local kits allow local people to take the initiative

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### **William's Rebuttal:**

- There is a misunderstanding that something global is more expensive
- If something is mass produced, it will be cheap
- We can tailor kits to each area just like Coca Cola tailors its taste to the local area
- If we get serious as a sector about creating something we can make something that really works

Questions were then invited from the floor:

- *What are the issues around durability and sustainability for both types of devices?*

Foyeke: Although locally made kits are not always very durable, they can usually be repaired easily, meaning that if something breaks, local people can repair the items themselves.

William: How long are we expecting any device distributed in an emergency to last? One year? More? If an item could last for a year it would be in line with other kits distributed in emergencies.

- *What about using local markets to create handwashing devices?*

William: At the moment we haven't made it clear that there is a market for a global handwashing device, so not many manufacturers have looked into this. The local materials available vary widely, so we need to find a design that is cheap and can work with local markets.

- *Comment: Both debaters are wrong and right – we shouldn't really be debating which is better; we should be looking for ways to promote whatever is the easiest way for people to wash their hands with a device.*

Smaller groups were then invited to a demonstration of different handwashing devices:

- Foot operated pumps
- Handy Andy
- Traditional Handwashing Devices (bowls, buckets)
- Oxfam Bucket
- Tippy Taps

Groups rated each device against a set of criteria. The criteria for voting were taken from the criteria for a good handwashing device. The results were fed back in plenary:

**Group 1:** rated the tippy tap first saying it was easy to adapt and rebuild, easy to set up but they were divided on durability – the device itself wasn't very durable but easy to replace broken parts

The worst rated was jugs and basins, as they were not water saving and not easy for individuals to use. They made the comment that there was no clear space for soap on any of the devices.



**Group 2:** tippy taps rated highest. The pumps were found to wet your legs when they were operated. The hands-free was felt to be flimsy and some were hard to use for children.

**Group 3:** rated the handy-andy highest, but debated around the use whether it was household or communal.

**Group 4:** thought traditional containers were both the best and the worst. All were very much context specific, and not one 100% satisfied the criteria. In acute emergencies you want something rapid and easy to distribute. We need to ensure we are evaluating what works in every emergency.

**Group 5:** gave no scores as they had a lot of debate around each device.

- *Comment: All devices could have been suitable depending on the context. We need to know what measures the community already uses and adapt devices and responses appropriately.*
- *Comment: People use different devices at different handwashing times – when we decide on what to distribute, we should be considering this.*

## Third Session

### Evaluation of Handwashing Promotion Programmes: Application to the Humanitarian Emergency Context

*Pavani Ram, MD, University of Berkeley*

This participative session focused on ways to evaluate hygiene promotion campaigns and examined the relevance, advantages and disadvantages of various hygiene behaviour measures that have been and could be used for this purpose.

Participants acknowledged the strong limitations of self-reported behaviour indicators in questionnaires such as “do you always/often/sometimes/never wash your hands after defecation/before preparing meals, etc” as several studies have consistently shown over-reporting compared to results measured by structured observations. The value of investigating self-reporting behaviour, in combination with other indicators, was however not to be underestimated to inform changes in knowledge and attitudes.

Some proxy indicators, such as observed ownership of soap, observed presence of water and soap near latrines of food preparation site, were deemed more objective measures of hygiene practices, and better indicators especially for “hardware” interventions, even though robust evidence linking these indicators and health impact is lacking.

Direct measurement of hygienic behaviour by structured observations is undoubtedly the most direct and detailed, but participants noted however a potential for bias as hygiene behaviour can be modified by the presence of observer. This method is also time-consuming and expensive, therefore cannot be used as a standard in all situations.

During a participative case study, participants developed a hypothetical evaluation protocol for hygiene promotion during an emergency. It was agreed that using several indicators, such as observation of handwashing materials availability and self-reported handwashing practices and reasons for handwashing, would provide a good basis for informing changes in attitudes and practices. A call for caution for establishing a rule of thumb for dimensioning sample size for measuring these indicators was raised by participants, and it was noted that methodological advice should be sought from experts if necessary.

Finally, even if no ideal indicator to measure handwashing is available as a gold standard, evaluation of hygiene promotion programs in emergencies should be done more often and the findings shared. The take home message was: “Don’t be afraid to evaluate!”

Pavani Ram and colleagues recently updated the WSP reference document “Practical guidance on measuring handwashing” and the updated version will be available online shortly.

## Fourth Session

### How to Configure a Comprehensive Behaviour Change Methodology

*Professor Hans-Joachim Mosler, Swiss Federal Institute of Aquatic Science and Technology (EAWAG)*

Prof. Mosler compared four approaches to sanitation and hygiene behaviour change in terms of methodology: Community Total-Led Sanitation (CLTS), Community Health Clubs (CHC), FOAM (Focus on Opportunity, Ability, and Motivation) and EAWAG's RANAS (Risk Attitude Normal Ability Self-Regulation) model.

Prof. Mosler argued that effective behaviour change techniques rely on identifying and measuring key determinants of behaviour change relevant to a particular intervention. In an analysis of the RANAS approach conducted by EAWAG, they determined that factors of cost, taste and self-efficacy are key drivers to behaviour change over other behavioural determinants. A guideline on how to conduct your own analysis is available at:

[http://www.eawag.ch/forschung/ess/schwerpunkte/ehpsy/Beh\\_Change\\_Guideline\\_2012.pdf](http://www.eawag.ch/forschung/ess/schwerpunkte/ehpsy/Beh_Change_Guideline_2012.pdf).

After giving an overview of the RANAS approach, Prof. Mosler presented a comparative analysis of the four behaviour change approaches in terms of their methodology. In discussion, Prof. Mosler argued that while CLTS was effective in engaging emotions of shame and disgust, the approach was not well enough defined in terms of how it actually effects change. He viewed CHC in a similar manner, in that it effectively engages peer pressure dynamics but is not well defined operationally. Regarding FOAM, Prof. Mosler noted that while it is a comprehensive framework, it is not as compatible with psychological theory.

Prof. Mosler presented his comparative analysis in the following table, arguing the strength of CLTS and CHC lie on the implementation side while FOAM and RANAS are stronger in both theory and implementation.

	CLTS	CHC	FOAM	RANAS
Definition determinants	(Yes)	(Yes)	Yes	Yes
Measurement determinants	No	No	Yes	Yes
Identification targets	No	No	(Yes)	Yes

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Catalogue BCTs	Yes	Yes	Yes	Yes
Design & implementation	Yes	Yes	(Yes)	(Yes)
Monitoring mechanics	No	No	No	Yes

In the question and answer session, participants discussed the relative merits of approaches such as CLTS that focus on one behaviour or approaches compared to CHC that encompass a range of behaviours. It was also noted that the RANAS model could be used to evaluate the CLTS model to determine exactly how emotions of disgust then effect behaviour change. This triggered a lively discussion between exponents and critics of CLTS in terms of the triggering process and relevance to emergency settings.

Prof. Mosler's presentation was then used as context for a 'fishbowl' discussion exercise, where participants could swap in and out to give their views on topics being discussed. The resulting discussion was wide ranging, featuring the following themes:

### **Approaches versus models**

RANAS appears to be an analytical model while CHC and CLTS are methodologies centred upon community action – do we really learn anything from a comparative analysis of such different approaches? Furthermore, should we discount that there can be value in enforcement? FOAM has enforcement aspects and in Tanzania, government enforcement had great success in both sanitation and education uptake.

### **Applicability to emergency settings, and the issue of trauma**

Can behaviour change approaches developed in 'development' settings be truly effective in 'emergency' settings? Furthermore, can behaviour change approaches be implemented in humanitarian settings at scale and at speed? On the other hand, are emergency contexts the ideal setting for behaviour change programmes as community behaviour is already in a state of change and these approaches empower and unite communities? Do these approaches rely too heavily on the strength of the facilitators rather than the framework of the approach itself – participants were able to cite examples of triggering being an uplifting event, and triggering being a traumatic event.

### **The need for evidence and guidance**

How can we best evaluate the success of behaviour change approaches in emergency contexts? While rigorous research can be a challenge, agencies need to get better at coordinating recording of success and lessons learned so approaches can be adapted and improved. Greater investment is required in evaluation in emergency contexts.

### **Adapting for emergencies? Combine with care!**

Can approaches such as CLTS and PHAST be mixed and matched, or are approaches only valuable in their entirety?

### **Do we need really another model?**

Do we need to invent a new behaviour change model or should we focus on making existing ones work better in emergency contexts with a focus on realistic goals within the constraints of the environment?

### **Human resources and training**

We should bear in mind the considerable number of people that are trained in existing approaches – when a new process is developed, we risk a lack of appropriate human resources. In the words of one participant, “we’re not going to send a plumber to design a complex water system but we seem to think it is OK to let someone with little training to design and implement hygiene promotion.”