



Rapid learning from hygiene promotion in Bhutan

Reach, fidelity, and effectiveness are key quality considerations in the implementation of handwashing communications programming. Review processes based on a theory of change, as experience in Bhutan demonstrates, have the potential to strengthen the outcomes of behaviour change campaigns and improve their subsequent embedding in health systems.

This learning brief summarises the outcomes of a review of the use of emotional drivers to promote handwashing within the national Rural Sanitation and Hygiene Programme of Bhutan in July 2021. Framing the hygiene review within a Theory of Change (ToC), we considered aspects of reach, fidelity, (audience) engagement, and perceived effectiveness of a handwashing intervention delivered as part of the Community Development for Health (CDH+) workshops. This framing helped to generate rapid findings, in a context of travel restrictions and limited access to communities due to COVID-19. The brief highlights elements of the implementation process that could be strengthened within the CDH+ intervention, as well as opportunities presented by the changing context in Bhutan.

Key messages

Increased mobile phone access, sanitation coverage and COVID-related hygiene awareness offer opportunities for greater impact. However, we need to understand how best to use these opportunities to influence late-adopters in particular.

Framing questions based on the CDH+ ToC helped to focus the rapid review and identify solutions specific to the intervention.

Additional training and support for implementers could help to improve intervention fidelity, while regular monitoring could enable early identification of issues as they arise.

Table 1: Hand hygiene components of the CDH+ intervention

Workshop			Follow-up visits
Glo-germ demonstration	Ugyen story	Settings game	
To evoke disgust – to enable participants to realise the importance of soap in removing invisible dirt and germs.	To evoke nurture – to enable participants to feel that teaching good habits such as hand washing with soap is important for their child’s success in life.	To enable participants to realise the importance of having a proper hand washing station and reminders at home, and to plan for having their own.	To remind participants about the commitments made at the workshop and to encourage progress and celebrate achievements.

What did we review?

Context

An intervention to promote handwashing with soap was developed in 2016–2017 by the Centre of Gravity creative agency, in partnership with the London School of Hygiene and Tropical Medicine (LSHTM), the Bhutan Ministry of Health (MOH), and SNV. It was based on the SuperAmma intervention, which uses emotional drivers rather than information and knowledge to effect behaviour change.¹ By incorporating emotive messages, the intervention sought to strengthen the hygiene promotion and handwashing with soap component of the national Rural Sanitation and Hygiene Programme.²

The intervention was delivered in Bhutan as part of a programme of Community Development for Health (CDH) workshops and is referred to as CDH+. The two-day, sanitation-focused triggering workshops incorporated elements of Community Led Total Sanitation (CLTS), alongside elements of appreciative enquiry and pride. The intention of CDH+ was to create demand for improved sanitation and hygiene practices, bring additional focus on hand hygiene, and strengthen community ownership of the process. The workshops were facilitated by government Health Assistants (HAs) with training and support provided by SNV and the MOH.

SNV in Bhutan piloted the CDH+ intervention in Trashigang district in partnership with the MOH. It was subsequently institutionalised within the national programme and was rolled out nationally between 2019 and 2021. The intervention has been described in detail elsewhere and is summarised in Table 1.

Intervention outcomes

Data on hygiene outcome indicators (the presence of soap and water near toilets and kitchens) were collected in six districts at baseline and again at the mid-term follow-up. This allowed for a comparison between households from the four districts that had received the intervention against the two districts that had yet to receive it. The results (see Table 2) suggest that the intervention contributed to a change in the hygiene outcome indicators.

¹ A. Biran, W.P. Schmidt, K.S. Varadharajan, et al., 'Effect of a behaviour-change intervention on handwashing with soap in India (SuperAmma): a cluster-randomised trial', *The Lancet Global Health*, vol. 2, no. 3, 2014, pp.e145–e154.

² SNV, 'Integrating hygiene innovation within government health systems: experiences from Bhutan', *Learning Brief*, The Hague, SNV, 2017 https://snv.org/public/cms/sites/default/files/explore/download/snv_bhutan_research_brief_bcc_2017_0.pdf (accessed 5 October 2021).

Table 2: Prevalence of soap and water present near toilets and kitchens in intervention and non-intervention communities

	% Present near toilet			% Present near kitchen		
	2018	2020	% Difference	2018	2020	% Difference
Intervention districts: Chukha, Dagana, Punakha and Zhemgang						
Mean (n baseline – 1,322; n follow-up – 1,214)	34.3	60.5	+26.25	42	63.75	+21.75
Non-intervention districts: Pemagatshel and Lhuntse						
Mean (n baseline – 314; n follow-up – 332)	34.3	60.5	+26.25	42	63.75	+21.75

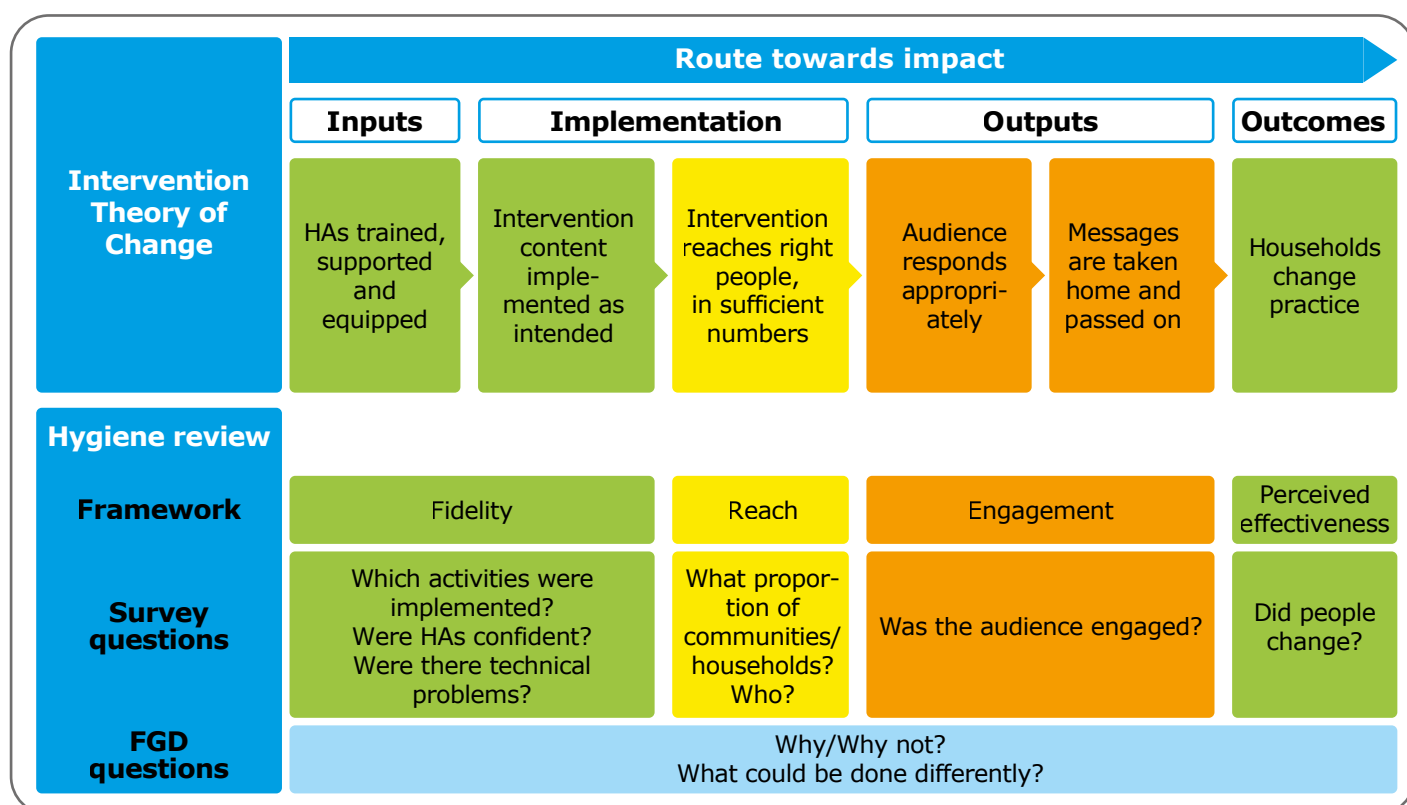
How did we review?

The focus of the hygiene review was to explore elements of the implementation process for the CDH+ intervention and to reflect on potential areas for improvement.

The review framework had four elements: reach, fidelity, engagement, and perceived effectiveness. These derived from the intervention’s ToC and gave rise to specific review questions (see Figure 1).

As a consequence of travel restrictions put in place due to COVID-19, the rapid review was conducted without access to beneficiary communities. Instead, the review focused on the perceptions of the HAs responsible for implementation, using an online survey of 68 HAs to scope implementation issues of potential importance. These issues were then explored in four virtual focus group discussions (FGDs) held via video conferencing, with one FGD held for the HAs in each district (Chukha, Dagana, Trashigang, and Zhemgang).

Figure 1: The intervention ToC and review framework





What did we learn?

Reach

HAs reported that the CDH+ workshops were attended by the majority of households in most communities, although it was sometimes difficult to ensure attendance. Often, attendance was dominated by women and older people – HAs reported that households often chose to send individuals who are least economically productive and whose time was therefore least costly to the household. Those who attended the workshops may not always have been the most influential household members or the most able to effect change in household practices. HAs believed that involving local leadership and incentivising participation could help ensure attendance by the desired target individuals.

Fidelity

Although the majority of HAs reported that each CDH+ component (see Table 1) was always included in the workshops, a sizeable minority indicated that some activities were not always included. Indeed, some HAs reported that the Ugyen story or glo-germ demonstration were never used. Furthermore, a number of HAs were inexperienced and reported a lack of confidence in

their ability to implement some of the activities. HAs thought that refresher training and a focus on skills such as better time management and communication could improve their confidence. Some HAs had innovated on existing activities and some had added new activities (e.g., sharing stories from other communities).

Engagement

HAs generally thought that the attendees engaged well with the CDH+ activities, though in some instances this was compromised by technical difficulties with the glo-germ demonstration or with the audio system for the Ugyen story. HAs believed that engagement was helped by the fact that the glo-germ demonstration was visual and interactive; the Ugyen story was relatable and emotionally moving; and the settings game was energising and fun.

Effectiveness

HAs believed that the intervention was effective in causing behaviour change. They thought the glo-germ demonstration made participants realise the importance of soap to remove invisible dirt from hands; the Ugyen story was emotionally moving; and the settings game reinforced the importance of having proper hand washing stations at home.

Without detracting from the apparent achievements of the intervention, it is worth noting that there remains a group of reluctant or late-adopter households who have not yet changed their hygiene practices. Further qualitative research with this group might reveal the reasons for this non-adoption and suggest different intervention avenues for the future.

The review framework with its four core elements has proved useful and has allowed us to relate the review directly to the CDH+ ToC. The review has also highlighted the potential value of collecting process monitoring data during intervention delivery, allowing real-time adjustments to be made and providing a ready source of data for future reviews. Facilitators were able to give useful insights into the intervention process; however, the lack of community perspectives is not ideal.

Recommendations

i) Improve reach and targeting of CDH+ intervention by:

- involving local leadership to influence the choice of attendees;
- incentivising achievement of hygiene targets for local leaders; and
- finding ways to ensure effective dissemination of the messages to target persons who do not attend the workshop through those who do attend. Further qualitative research could help us understand the extent to which women of different ages are willing and able to do this and the support they may need.

ii) Improve fidelity of CDH+ intervention delivery by:

- offering refresher training to HAs;
- including training on generic skills such as time management and communication;
- ensuring good quality and functional equipment (e.g., audio system);
- facilitating support from local government for follow-up visits; and
- conducting systematic and regular monitoring during implementation to identify and address issues as they arise.

iii) Improve the effectiveness of the intervention with respect to late-adopters and 'non-doers' by:

- conducting further research to identify

barriers and levers for change specific to this group and modifying the intervention accordingly.

iv) Capitalise on the changing context in Bhutan:

A changing context offers opportunities for promoting hygiene behaviour change:

- Smart phone penetration in rural Bhutan is increasing. Most caregivers now have access to smart phones.
- Due to COVID-19, stakeholders at all levels give more importance to hand washing with soap.
- Access to water, sanitation and hygiene (WASH) infrastructure in rural Bhutan is improving, with more pour-flush toilets and better water supply at the household level.

Conclusion

The CDH+ intervention has plausibly contributed to reported changes in hygiene indicators. From the hygiene review, we have learnt that the intervention could be more effective if it were to directly reach more influential caregivers. Furthermore, fidelity could be improved, perhaps through additional training and regular monitoring and support.

A significant proportion of households showed no evidence of changes in the hygiene indicators, however. Further research among these late-adopters might reveal how this group differs from those who have been influenced by the intervention. Such an understanding could enable refinement of the intervention to better influence late-adopter households. Additionally, the changing context in Bhutan, including an increase in smartphone ownership among caregivers and attitudes towards handwashing, offers new opportunities for hygiene promotion.

The direct link between the design of the review framework and the CDH+ ToC helped direct us towards areas of implementation that have the potential to be strengthened.

Acknowledgements

This brief summarises a rapid review conducted as part of the mid-term review of SNV Bhutan's Beyond the Finish Line – Sustainable Sanitation and Hygiene for All Project (2018–2022). The brief was prepared by Balaji Gopalan (Upward Spiral) and Adam Biran (LSHTM). It was edited by Joanna Fottrell and designed by Crunchy Frog.

Beyond the Finish Line

Beyond the Finish Line (BFL) - Sustainable Sanitation and Hygiene for All (2018-2022) in Bhutan aims to progress equitable and universal access to safely managed sanitation and hygiene for at least 214,596 people across eight districts in Bhutan.

Beyond the Finish Line programme in Bhutan is funded by the Australian Government's Water for Women Fund.

SNV

SNV is a not-for-profit international development organisation that makes a lasting difference in the lives of people living in poverty by helping them raise incomes and access basic services. Focusing on three sectors – Agriculture, Energy and WASH – SNV has a long-term, local presence in over 25 countries in Asia, Africa and Latin America.

Upward Spiral

Upward Spiral specialises in designing and delivering effective behaviour change interventions to create social impact at scale. It has worked extensively in the WASH sector across Asia and Africa and is currently piloting the Behaviour Design Hub for SNV, a new model for programme design for multinational foundations. Upward Spiral led the creative design process for the interventions with the SNV Bhutan team.

LSHTM

The London School of Hygiene and Tropical Medicine (LSHTM) is home to the Environmental Health Group, a multidisciplinary research group with a long history of work on health and behaviour change in relation to water, sanitation and hygiene in resource constrained settings.

Photos

P1 and P5: Health Assistants (HAs) in Gasa facilitating CDH+ workshops (Tashi Dorji/SNV)



SNV, 'Rapid learning from hygiene promotion in Bhutan', *Learning brief*, The Hague, SNV, 2021.

For more information

Kencho Wangdi
WASH Sector Leader
SNV in Bhutan
kwangdi@snv.org