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Kenya Red Cross

LEARNING BRIEF
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Effectiveness of the Jengu Handwashing Facility to Increase Handwashing with Soap among Crisis-Affected Populations in Dadaab Refugee Camp, Kenya:

Findings and Recommendations

Introduction

Crisis-affected populations often have poor access to water, sanitation and hygiene (WASH), increased risk of diarrheal diseases and even death. Improved hygiene practices like handwashing with soap is central to the prevention of communicable diseases. Research has shown that one of the strongest determinants of handwashing behavior is access to a desirable and conveniently located handwashing facilities with soap and water present. This learning brief provides evidence on the effect of soap and Jengu handwashing facility provision on increasing handwashing with soap behaviours as well as the acceptability, usability, durability, maintenance and sustainable use of the Jengu handwashing facility. For 36 months, APHRC collaborated with Kenya Red Cross, London School of Hygiene and Tropical Medicine and British Red Cross to conduct the study in Dadaab Refugee Camp. Located in northern Kenya, Dadaab is the fourth largest refugee settlement in the world.

Approach

The study commenced with formative research on the preferences and perception of handwashing with soap, and the determinants of handwashing behavior in the community. A baseline survey and structured observations were conducted in 300 randomly selected households across the complex which were again randomly assigned to control and intervention groups to assess the change in handwashing behavior during project implementation. Of all the households included in the study, 150 of these received a Jengu handwashing facility, a jerry can for water supply to the facility, and regular supply of soap throughout the study period. The control group (150 households) only received soap throughout the study period (in the same quantity as the intervention arm). A follow-up survey and observations were conducted at the one-month mark and at endline (9 months post-intervention). As part of process monitoring, spot-check evaluations were also conducted regarding how the Jengu facility was being used, to understand the acceptability, usability, durability and maintenance aspects.

Jengu unit for different users (adults and children)

Key findings

Hand washing observation- this involved monitoring and recording critical hand washing moments and practices within domestic settings

a Changes in observed handwashing across timepoints and groups

Overall, there was a twofold increase in the number of respondents washing their hands with soap and water, between baseline and one month post distribution in the control this changed from 190 to 353 and in the intervention group the change was 202 to 427 *(Figure 1)*.

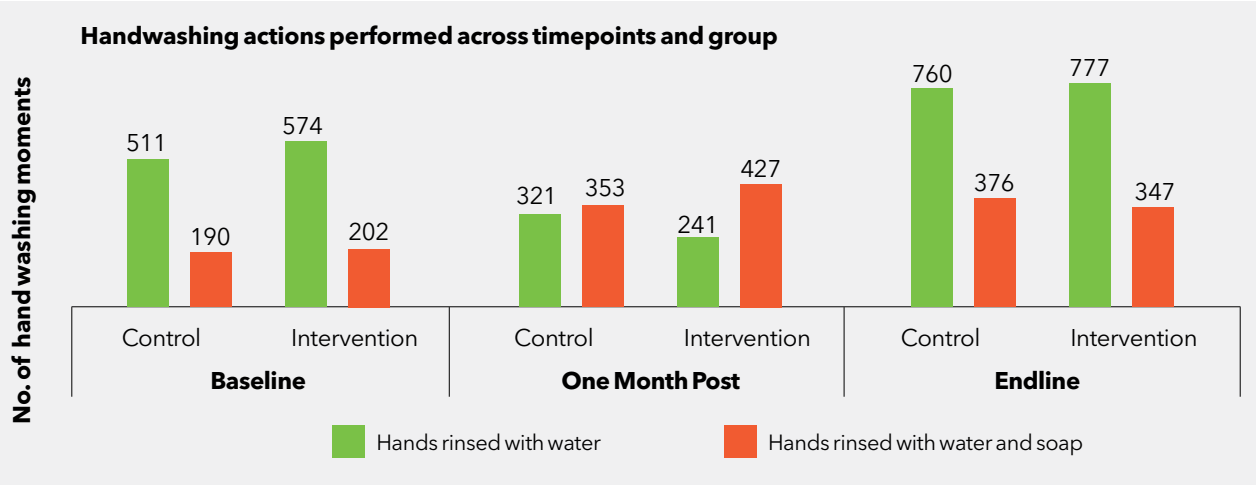

Figure 1: Handwashing moments with soap and water by timepoints and groups

b Changes in reported diarrhea

Overall, there was a steady decline in the number of diarrhea cases reported across three data points as illustrated in *Figure 2*.

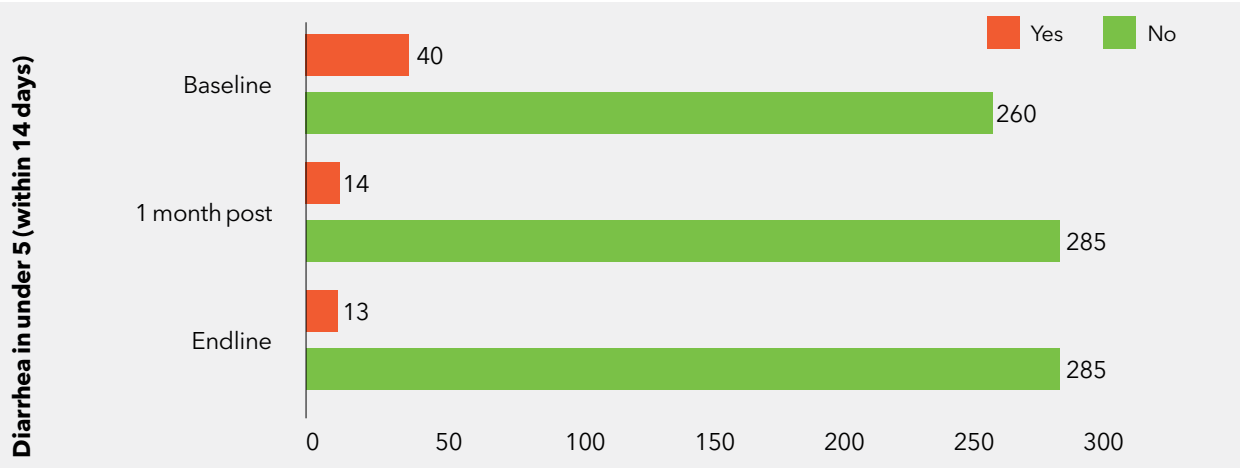

Figure 2: Changes in reported diarrhea among children under 5 across the three timepoints

c Availability of water and soap

We observed a significant increase in the number of respondents having soap available at or near the handwashing facility across the groups, between baseline and one month post distribution in the control this changed from 4 to 45 and in the intervention group the change was 9 to 100. This was followed by a slight decrease between one month post distribution and endline in the control this changed from 45 to 29 and in the intervention group the change was 100 to 49 *(Figure 3)*

There was a significant increase in availability of handwashing water observed near the hand washing facility, between baseline and one month post distribution in the control this changed from 4 to 47 and in the intervention group the change was 11 to 112. This was followed by a slight decrease between one month post distribution and endline in the control this changed from 47 to 44 and in the intervention group the change was 112 to 83 *(Figure 4)*.

Soap availability across timepoints and groups

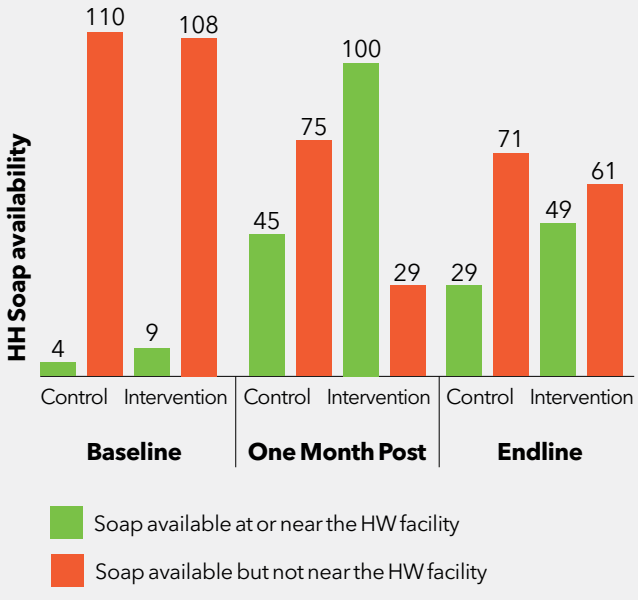

Figure 3: Soap availability across timepoints and groups

Water availabilty across timepoints and groups

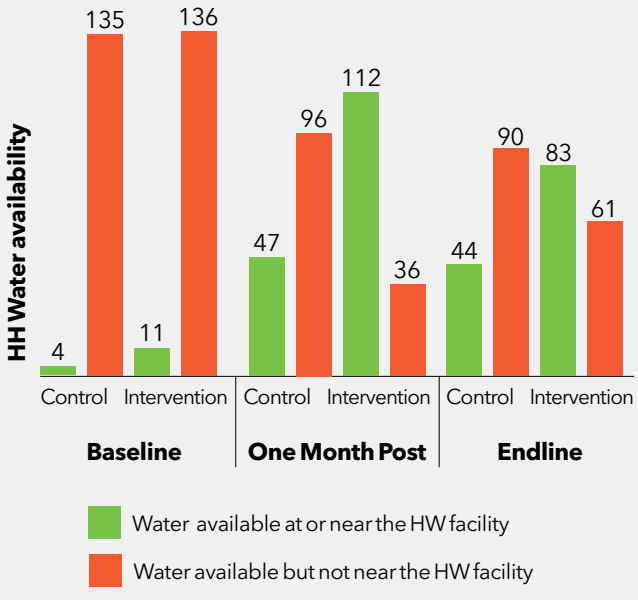

Figure 4: Water availability across timepoints

Id Critical handwashing with soap and water moments

Overall, many critical handwashing moments were observed at one month and endline respectively. A majority of the observations were after using the toilet, before eating, and before preparing food. This was consistent across all time points and across the control and intervention groups *(Figure 5 and 6)*.

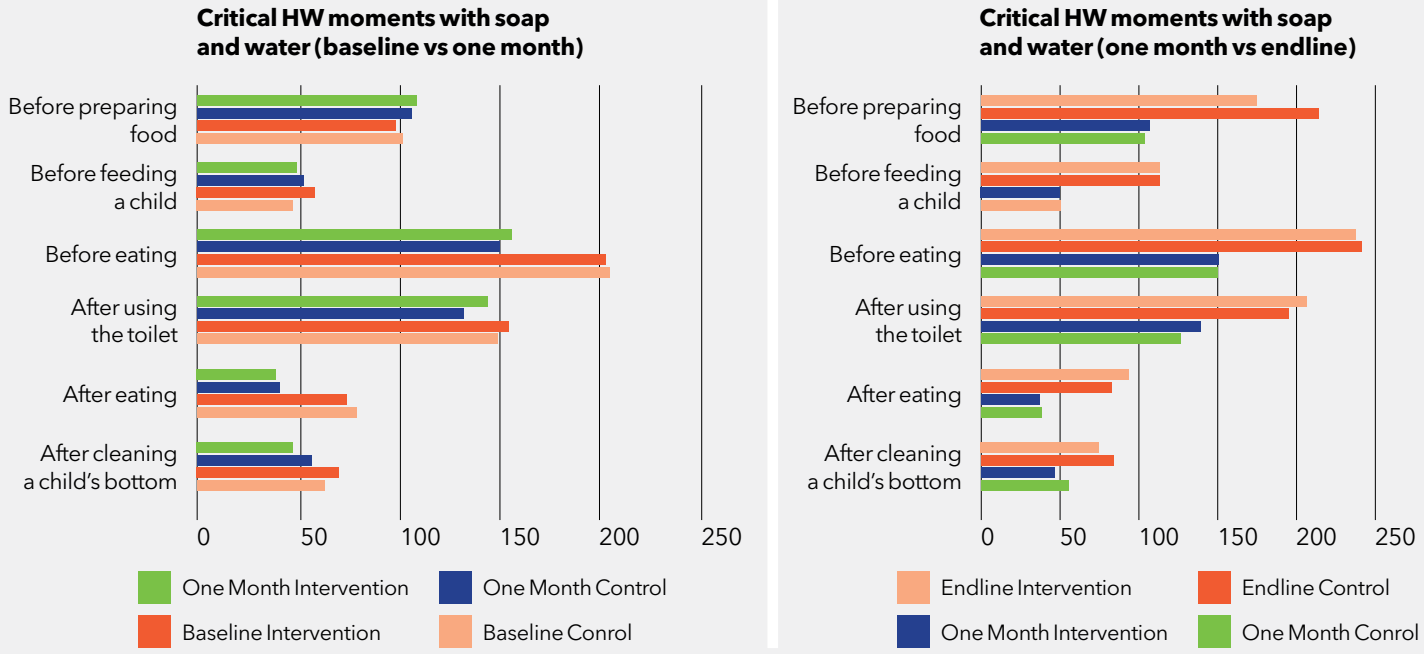

Figure 5 and 6: Critical handwashing moments with soap and water across time points and groups

Ie Community perceptions of the soap (Eco soap) and the Jengu facility

- Over 90% of the recipients in the study expressed liking for the soap and nearly all (99%) reported that they were willing to buy the soap if it was made available in the market.
- Overall, respondents appreciated the Jengu facility especially the design that considered different user needs, for example, children and people with disability).

> **"I feel happy, and the handwashing facility is working. It has benefited me a lot and the children when they come from Madrasa (classes) and I am away from home. They used to eat meals without washing hands but now it is different"** *(IDI, Household head, Section B, Male)"*

- Notably, 65 respondents had concerns about the basin used in the Jengu units as these were easily broken.

> **"Yes, the facility functions well except the basin, which is broken"** *(IDI, Household head, Section E, Male)"*

- Lastly, there were concerns about usage by children- especially that the foot pump was difficult to operate.

Lessons learned

During implementation, the study-team noted several aspects arising from the intervention:

- Provision of soap facilitated handwashing with soap practices in the long run
- The Jengu unit provided access to handwashing and enabled handwashing with soap Our results showed that over 98% of the respondents liked the Jengu unit.
- Local community leaders provided opportunities for community entry and monitoring of handwashing practices.

Recommendations

Key actors including the humanitarian space, and the government should consider the following to ensure increased and sustained handwashing in the Dadaab Refugee Camp:

- There is need to address the barriers that hinder sustained hand washing with water and soap in Dadaab refugee settlement.
- Handwashing with soap in Dadaab could be increased and sustained if complemented with target continuous messaging and sensitization initiatives.
- Building capacity and involvement of key influencers, such as community leaders and community health promoters, is important in influencing optimal hand hygiene practices in the community.