

User-Centered Community Engagement (UCCE) Approach to Design Child-Friendly WASH Facilities in Humanitarian Settings

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Titly Sen¹, Afsana Yeamin¹, Ruhul Amin¹, Noshin Saiyara Shuchi¹, Ben Fehnart², Julián Riveros², Tarique Md. Nurul Huda^{1,3}, Farjana Jahan^{1,4}

¹Environmental Health and WASH, Health Systems and Population Studies Division, International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b), Dhaka, Bangladesh

²Eclipse Experience, United Kingdom

³Department of Public Health, College of Applied Medical Sciences, Qassim University, Buraydah, Saudi Arabia

⁴Heat and Health Research Centre, Faculty of Medicine and Health, University of Sydney, Australia

BACKGROUND



Bangladesh has been hosting the Forcibly Displaced Myanmar Nationals (FDMN) since 2017 in one of the largest refugee settlements in the world.



Approximately one million FDMN are residing across 33 camps in Cox's Bazar and half of the population is children.



In these FDMN camps, sanitation facilities such as toilets and handwashing stations are limited. This contributes to unsafe hygiene practices with open defecation being one of the most common practices among children.



The lack of clear guidelines for construction in emergency services is one of the major reasons why children often do not use toilet facilities.

Objectives

1. Design and develop child-friendly toilets and handwashing stations utilizing UCCE method
2. Assessment of changes in reported use of WASH facilities and user satisfaction levels
3. Qualitative evaluation of the implementation process to understand the factors affecting widespread adoption

Outcomes

- ✓ Co-creation and development of a prototype of child-friendly toilet and handwashing station model
- ✓ Increased use and satisfaction among users due to improved accessibility and a sense of ownership.
- ✓ Clear understanding of the factors influencing the UCCE adoption to guide future expansion and sustainability.

Ideas implementation through construction of 80 toilets and handwashing stations based on users' needs and implementers' feasibility.

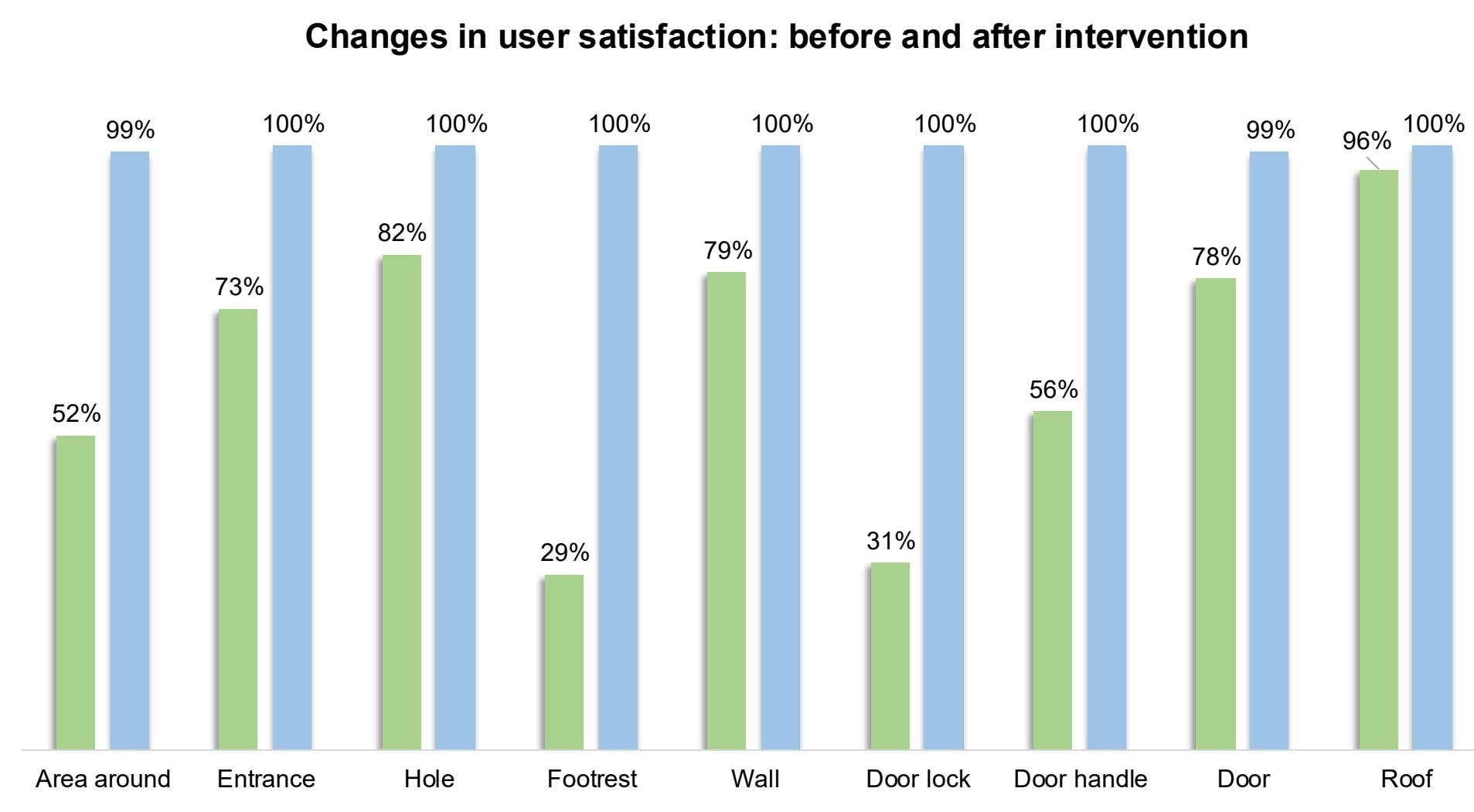


A child washing hands using child-friendly facility

Identified problems	Possible solutions
Toilet facility (inside and outside)	
Wall makes the inside of the facility hot	Ventilation Heat insulated sheet in roof
Large pan hole	Mid-sized pan and reduced footrest height Vertical support handle
Too high door lock	Height adjusted extra handle and child-friendly lever lock
Dark surrounding	Solar light
Handwashing Station	
Too high sink and water tap	Height-adjusted sink and water tap
Structural theft	Semi-permanent structure

Interactive Digital Survey 2 assessed the current sanitation practices and the satisfaction of children after the construction of new WASH facilities.

- Full-time toilet users increased from 7% to 18%
- Overall satisfaction increased from 8% to 41% for toilets and 3% to 34% for handwashing stations
- According to caregivers, handwashing practices among children increased during critical times, including after defecation (84%), after urination (27%), and after noticing visible dirt on hands (19%)



CONCLUSION

- User-Centered Community Engagement (UCCE) offered a responsive and context-specific approach. This study found UCCE effective in rapidly promoting WASH adoption aligned with community needs while addressing practical challenges. By engaging users directly, it supported sustainable behavior change, assured practical intervention and strengthened community ownership for long-term impact.
- The principles of this community centered approach can be further scaled and adapted in similar humanitarian and low-resource settings.

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Co-creation sessions gathered potential solutions from children and their caregivers to design toilets and handwashing stations. Voting segments, problem trees and pictures of traditional facilities were used to better visualize the barriers.

Photo: Co-creation sessions in camp 8W