

Cluster-randomized controlled trials of individual and combined water, sanitation, hygiene, and nutritional interventions in rural Bangladesh and Kenya: The WASH Benefits Study design and rationale

Appendix 2. Critical Benchmarks for Intervention Monitoring

The principal and co-principal investigators will carefully review the intervention fidelity assessments and identify any areas of low uptake of interventions. Critical benchmarks for uptake based on unannounced visits are summarized below for each country.

While unlikely, it is also possible that the study promoters will be implementing the intervention precisely as planned, but uptake is lower than expected. If uptake is below the benchmark in the setting where implementation followed the prescribed approach, the qualitative team in each country will conduct more in-depth evaluation will be framed around the behavior change models guiding the intervention design.

Bangladesh critical benchmarks

Intervention	Indicator	Benchmark
Overall implementation	Participant reports a promoter visit in the past 28 days to deliver messages about the intervention	90%
Water quality	Households with children 6 – 24 months of age have stored chlorinated drinking water (measured by residual chlorine)	65%
Sanitation	Among participants with a child under 36 months, the participant reports that the youngest child’s most recent defecation was either directly into the latrine or the feces were disposed of into the latrine (based on open-ended questions about where the child defecated and what was done with the feces)	65%
	Sani-scoop easily accessible to mother	80%
	Households in the bari have a latrine with a functional water seal	80%
Handwashing	Households have at least one handwashing station with soap and water present	65%
Nutrition	Within households with targeted children > 6 months of age, the stock of LNS sachets is consistent with the daily use of two sachets per day based on records of the last distribution and the number of sachets currently observed in the home.	70%
	Report hearing any messages on infant/child nutrition and or Sonamoni (lipid based nutrient supplement)	80%

Kenya critical benchmarks

Intervention	Indicator	Benchmark
Overall implementation	Participant reports a promoter visit in the past 28 days to deliver messages about the intervention	90%
	Mid-upper arm circumference recorded in the past 28 days based on caregiver's tracking booklet	90%
Water quality	Drinking water stored in the participant's home has residual chlorine	65%
Sanitation	Latrine cover observed over the hole in the primary latrine used by the participant	65%
	Among participants with a child under 36 months, the participant reports that the youngest child's most recent defecation was either directly into the latrine or the feces were disposed of into the latrine (based on open-ended questions about where the child defecated and what was done with the feces).	65%
Handwashing	Soapy water and rinse water are observed at one or more tippy taps in participant's compound	65%
Nutrition	Within households with targeted children > 6 months of age, the stock of LNS sachets is consistent with the daily use of two sachets per day based on records of the last distribution and the number of sachets currently observed in the home.	70%