Introduction

BACKGROUND

- CLTS was introduced in Mali in 2009 at a time when reaching the MDG for sanitation would require 1M people per year to gain access to improved sanitation
- CLTS started with a successful pilot in 15 villages
- The National Directorate of Sanitation included CLTS in the National Strategy for Rural Sanitation and began to scale-up throughout the country.

Achieving Open Defecation Free Status means that:

1. Each family has a latrine equipped with a cover that limits the proliferation of flies from the pit
2. All members of the family exclusively use the latrine to defecate
3. Each latrine is equipped with a handwashing device (water and soap or ash)

KEY STAKEHOLDERS

- UNICEF
- Ministry of Health and Sanitation
- NGOs
- Local community leaders

Methods

1. 121 eligible communities were sampled. Those were randomly selected from a census of 402 villages that met reaching the MDG for sanitation communities. The latrine coverage (between 25-75%), low latrine coverage (less than 60% of households with a private latrine) and not previously enrolled in a CLTS programme

2. A buffer of 10 km between each study village was set up to prevent contamination between treatment and control villages

3. Baseline information was collected in all the communities prior to the intervention, covering:
   - household demographic characteristics
   - health information (including child anthropometrics)
   - hygiene and sanitation: availability of latrine and handwashing stations, cleanliness, satisfaction, privacy, security, open defecation rates
   - drinking water microbial quality
   - educational and labour outcomes, social attitudes, capacity for collective action

4. 50% of the communities randomly assigned to receive CLTS

   - 4532 households were enrolled at baseline and 4259 were visited at follow-up (85% match at follow-up)

5. Follow-up information was collected one year after the intervention finished

Results - 1

1. Very significant increase in access to private latrines, improved quality of latrines and reduction in OOD

   - Access to a private latrine almost doubled among children aged 5-16
   - Defecation rate fell by 75% among adult women and 40% among children aged 5-16
   - Children too young to use latrines were more likely to use a potty
   - Latrines in CLTS households were more than twice as likely to have a cover over the hole of the pit
   - But no impact on bacteriological contamination of latrine water

2. Cleaner latrines and improved hygiene in CLTS villages

   - CLTS households were 3 times more likely to have soap present and 5 times more likely to have water present
   - Latrines in CLTS households were more than twice as likely to have a cover over the hole of the pit

3. Positive and significant impact on growth outcomes:

   - Children under-five years of age in CLTS villages was taller
   - 15% reduction in stunting and 20% reduction in severe stunting for children under-five years of age in CLTS villages compared to control villages
   - 15% reduction in underweight and 35% reduction in severe underweight

4. 57% reduction in diarrhoea-related under-five mortality in CLTS villages

5. No statistically significant impacts on child diarrhoea or respiratory illness. However, using a difference-in-difference approach of CLTS intervention to account for baseline differences:

   - Significant reductions in loss or watery stools among children with non-exclusive breastfeeding
   - Significant reductions in respiratory illness, including cough, difficulty breathing, and congestion

Results - 2

6. Positive and statistically significant impact of the CLTS programme on preventional behaviors such as cooperation and community empowerment

7. Increased feelings of privacy and safety reported by CLTS households vs. control households

   - Women were significantly more likely to feel safe than those who did not participate
   - Women were significantly more likely to feel safe defecating at night

8. No evidence of the impacts of the intervention on access to sanitation declined over time

Conclusions

1. Sanitation programmes can have a significant impact if implemented with the right approach stressing behavior and cleanliness, with
   - leadership from the government
   - strong teams of national coaches and trainers
   - incentives for communities and volunteers
   - active M&E including verification, certification and celebration process

2. No significant impact on diarrhoea morbidity yet a strong impact on nutrition indicators

   - Sanitation is a nutrition-sensitive intervention on the prevention side of nutrition issues
   - CLTS contributes to the prevalence of non-diarrhoeal locally transmitted pathogen (including soil-transmitted helminths, Giardia, Ascaris and hookworms) environmental enteropathy and other pathogens with effects as significant as diarrhoea
   - Moreover, significant impact on the prevalence of diarrhoeal diseases may require improved adoption of handwashing with soap practices as well as improved access to safe water

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