Impacts of a container-based, household toilet and waste collection service intervention

Cap Haitien, Haiti

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Our Pilot: A Sanitation Service in Cap Haitien, Haiti
**Study Site and Methods**

**SHADA**
- Treatment Cohort (N = 118)
- Comparison Cohort 1 (N=115)
- Informal settlement
- 3 SOIL managed public toilets
- Randomly selected HHs

**AVYASYON**
- Comparison Cohort 2 (N=131)
- Formal settlement
- Community managed public toilets
- Every third HH surveyed

**Locations**
- Shada: Informal settlement with SOIL managed public toilets, randomly selected HHs.
- Avyasyon: Formal settlement with community managed public toilets, every third HH surveyed.

**Characteristics**
- SHADA: ~Sea level, No roads, No sewer, No piped water system.
- AVYASYON: No roads, No sewer, No piped water system.
Research Questions:

1.) Are there changes in treatment HHs sanitation practices, perceptions and attitudes, relative to HHs in two comparison cohorts?

2.) Would CBS toilets result in increased fecal contamination of the HH stored drinking water?
“Overall, how satisfied are members of your household with your current sanitation situation?”

- **Treatment**: 87% at Endline compared to 32% at Baseline.
- **Comparison 1**: 39% at Endline compared to 35% at Baseline.
- **Comparison 2**: 26% at Endline compared to 36% at Baseline.

- Satisfied (dark blue)
- Unsatisfied (brown)
“My household's current sanitation conditions make me feel ... ashamed?”

**Treatment**
- Baseline: 53%
- Endline: 6%

**Comparison 1**
- Baseline: 46%
- Endline: 65%
At US$5.00 per month, the CBS service represents 2.9% of the average monthly expenditures for sample HHs.
No Significant Increase in *E. coli* Contamination of Stored Drinking Water (IDEXX)

**Treatment (N= 35, 32)**

- Baseline: 23% <10 MPN/100ml, 15% 10 – 100 MPN/100ml, 10% >100 MPN/100ml
- Endline: 10% <10 MPN/100ml, 8% 10 – 100 MPN/100ml, 10% >100 MPN/100ml

**Comparison 1 (N= 47, 30)**

- Baseline: 24% <10 MPN/100ml, 33% 10 – 100 MPN/100ml, 20% >100 MPN/100ml
- Endline: 13% <10 MPN/100ml, 17% 10 – 100 MPN/100ml, 17% >100 MPN/100ml

**Comparison 2 (N= 66, 53)**

- Baseline: 17% <10 MPN/100ml, 9% 10 – 100 MPN/100ml, 15% >100 MPN/100ml
- Endline: 15% <10 MPN/100ml, 6% 10 – 100 MPN/100ml, 14% >100 MPN/100ml
The Findings Suggest:

• CBS services appear to elicit demand in settings where there is little or no demand for traditional options.

• CBS in this context does not appear to be increasing contamination in the HH.

• CBS systems could address many of the financial, technical, and political challenges of sanitation infrastructure in low-income urban communities.
Thank You
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