Contributing to an evidence base for policy and funding decisions

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Evidence of Impact

- **Absenteeism due to illness: Girls**
  - HW and WT: 37% reduction (95% CI 62% to +4%)
  - +Sanitation: 42% reduction (95% CI 66% to 0%)
  - No significant impact on boys

- **Water provision increased absenteeism**
  - Potentially due to increased enrollment from water supply improvement

- **Ascaris reinfection:**
  - HW + Sanitation: Significant reduction in prevalence
  - Reduction in worm burden

- **Provision of water increases even in schools where only hygiene education was provided**
Worm prevalence

Ascaris

Baseline | Midterm | Final
---|---|---
Control: 0.0% | 5.0% | 15.0%
Intervention: 0.0% | 4.0% | 10.0%

At least one worm

Baseline | Midterm | Final
---|---|---
Control: 0.0% | 4.0% | 10.0%
Intervention: 0.0% | 2.0% | 5.0%
## Improving school conditions

<table>
<thead>
<tr>
<th>Variable</th>
<th>WT+HW</th>
<th>WT+HW SAN</th>
<th>Control</th>
<th>Water</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water available day of field visit (%)</td>
<td>***</td>
<td>***</td>
<td>55%</td>
<td>46%</td>
<td>56%</td>
</tr>
<tr>
<td>Baseline</td>
<td>55%</td>
<td>42%</td>
<td>55%</td>
<td>46%</td>
<td>56%</td>
</tr>
<tr>
<td>Final</td>
<td>69%</td>
<td>83%</td>
<td>13%</td>
<td>83%</td>
<td>23%</td>
</tr>
<tr>
<td>Handwashing water available day of field visit (%)</td>
<td>***</td>
<td>***</td>
<td>13%</td>
<td>83%</td>
<td>23%</td>
</tr>
<tr>
<td>Baseline</td>
<td>16%</td>
<td>2%</td>
<td>10%</td>
<td>17%</td>
<td>1%</td>
</tr>
<tr>
<td>Final</td>
<td>66%</td>
<td>81%</td>
<td>3%</td>
<td>79%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Drinking water was treated day of field visit (%)</td>
<td>***</td>
<td>***</td>
<td>3%</td>
<td>79%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Baseline</td>
<td>5%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Final</td>
<td>59%</td>
<td>63%</td>
<td>0%</td>
<td>63%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Equity: Absenteeism in last two weeks by gender and SES quintile

<table>
<thead>
<tr>
<th>% absent in previous two weeks</th>
<th>Total</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>19.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>17.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>20.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

% absent in previous two weeks

- Total: 19.2%
- Boys: 17.7%
- Girls: 20.8%
Sustainability

Provided handwashing water on day of visit

Residual chlorine on day of visit

Provided drinking water on day of visit

- 2006
- 2008
Provision of handwashing water

% observed to have handwashing water

- Base
- Base + Sanitation
- Base/San Control
- Water
- Water Control

Compared to 18% in pilot
Knowledge
Opportunities, Gaps, and Next Steps

1. Equity dimensions
   - Gender and SES
2. Sustainability
   - Monitoring approaches and accountability
   - Sustainably technologies for sanitation and soap provision
   - Models for service delivery
3. Behavioral change and motivators
4. Impact of school WASH on educational attainment
5. Exposure pathways of pathogens
   - Understand intermediate outcomes such as use
6. Engagement with other sectors
   - Nutrition, NTDs (helminths), education, maternal health
Global Monitoring Systems

- **UNICEF report:**
  1. 46% of schools have water (of 33 countries)
  2. 37% have adequate sanitation (of 25 countries)
- **There is no mechanism that monitors WASH in schools coverage**
  1. Ministries know how many teachers and pupils they have, but not the WASH coverage

We require proportion of schools in each country with:
- Sufficient # of usable latrines?
  1. Are these latrines well maintained? Private?
- Sufficient quantities of water fit for drinking and hygiene **every day** of the school year?
- Soap available for handwashing?