

# Impact Assessment for Haath Mein Sehat (HMS) Hygiene Education Program: Lessons Learned and Future Directions

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# 5 Years of HMS: Overview

- Point-of-use water treatment promotion
- Community-based hygiene education
  - Network of over 50 student volunteers from 3 colleges
  - Partnerships with NGOs
  - Self-sufficient education kit and manual
- Water quality testing
  - Routine monthly monitoring in selected homes for over 2 years

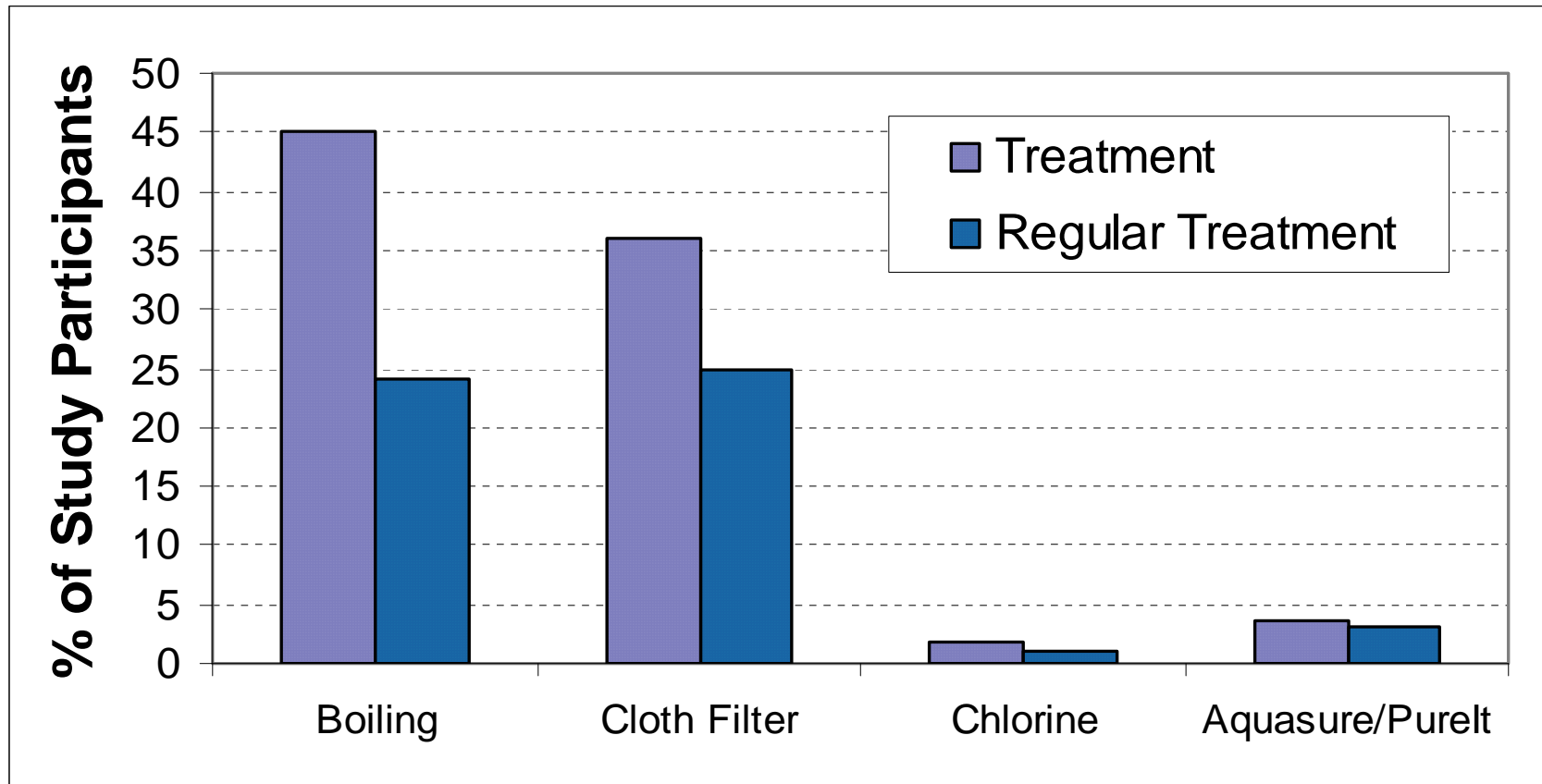


# Monitoring and Evaluation

- 320 HH cluster-randomized control trial in Behrampada
- Objectives:
  - (1) Assess the impact of the HMS education program on the burden of diarrheal disease in children under the age of five
  - (2) Mid-point needs assessment
  - (3) Feedback mechanism both to improve the education curriculum and design future interventions
- Data collected on water treatment practices, tap and stored water quality and health outcomes

# Water Treatment Practices

Approximately 25% of study participants perform rigorous water treatment method on regular basis



# Water Quality and Diarrhea

- Water Quality (total coliforms, E. coli)
  - Tap water quality acceptable during dry season
  - Elevated counts in stored water samples
  - Elevated counts during monsoons
- Childhood Diarrhea
  - 13% of children had diarrhea in week preceding interview
  - Incidence rate was 7.2 episodes per person per year
  - 92% of participants perceived diarrhea as serious threat
  - 18% identified contaminated water as risk factor for diarrhea in children

# Conclusions and Future Directions

- (1) Boiling and cloth filters preferred by users over chlorine and commercial treatment devices
  - Focus on boiling as a treatment technology
  - Subsidize commercially available units to approximate cost of boiling
- (2) Promote water treatment during monsoon
- (3) Include safe storage container with any water treatment system
- (4) High diarrhea incidence despite acceptable WQ

# Conclusions and Future Directions

- (1) Boiling and cloth filters preferred over chlorine and commercial treatment devices
- (2) Promote water treatment during monsoon
  - People already use differential treatment practices during the monsoons
  - Consumables better than durables
- (3) Include safe storage container with any water treatment system
- (4) High diarrhea incidence despite acceptable WQ

# Conclusions and Future Directions

- (1) Boiling and cloth filters preferred over chlorine and commercial treatment devices
- (2) Promote water treatment during monsoon
- (3) Include safe storage container with any water treatment system
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# Conclusions and Future Directions

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- (2) Promote water treatment during monsoon
- (3) Include safe storage container with any water treatment system
- (4) High diarrhea incidence despite acceptable WQ
  - Other major transmission pathways
  - Emphasize handwashing

# Roadmap: Summer 2009

- Measure usability, adoption and adherence for:
  - LifeStraw Family (at subsidized price) coupled with safe water storage container
  - Boiling coupled with safe water storage container
  - Safe water storage container only
- Pilot and evaluate handwashing campaign in primary schools
- Collect follow-up data for health impact assessment study