

# Monitoring Impacts of WASH Interventions in Bangladesh, the Health Impact Study

“Sanitation, Hygiene education, and Water supply intervention in rural Bangladesh” (SHEWA-B)



# SHEWA-B Project

- Program targets 30 million rural Bangladeshi people
- Budget of over 100 million dollars
- Implemented by Government of Bangladesh with technical support from UNICEF.
- Targets behavior change in sanitation & hygiene
  - Support for water in arsenic-affected areas

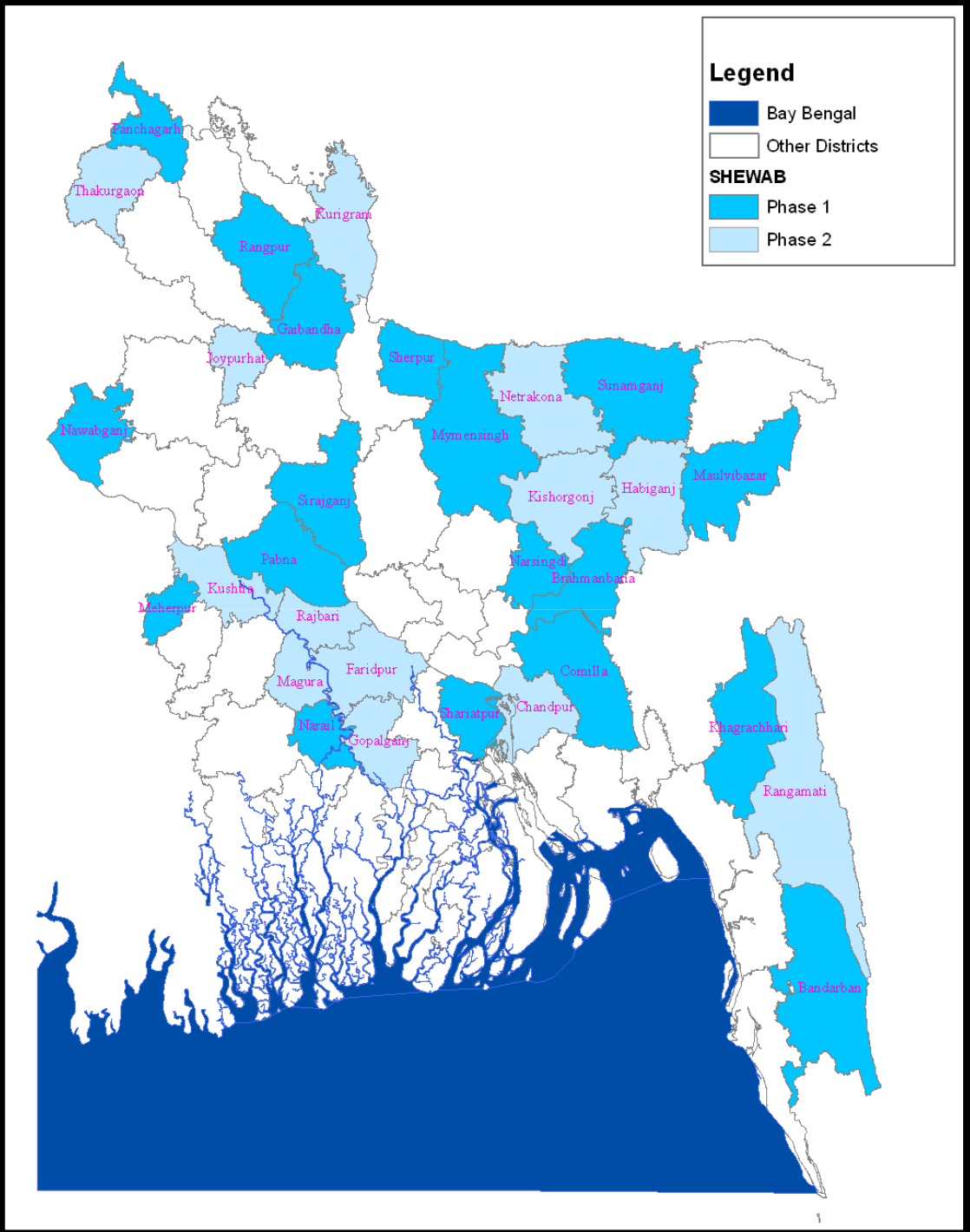
## SHEWA-B Intervention

- Participatory, demand-driven approach at community level
- Local NGOs subcontracted by GOB
  - 10,000 Community hygiene promoters (CHP)
  - 500 to 550 households per CHP
- Intervention method include:
  - Household visits, court yard meetings
  - Tea stall sessions, Watsan fair
  - Village theatre

## SHEWA-B Intervention

- CHPs emphasized the promotion of:
  - Hand washing with soap
  - Appropriate feces disposal
  - Latrine coverage and usage (without project subsidy)
  - Appropriate waste disposal
  - Appropriate menstrual hygiene
  - Access to and use of arsenic-free water
  - Safe collection and storage of drinking water

Intervention  
areas of  
SHEWA-B



# Purpose of HIS

To investigate the health related impact of the program interventions by:

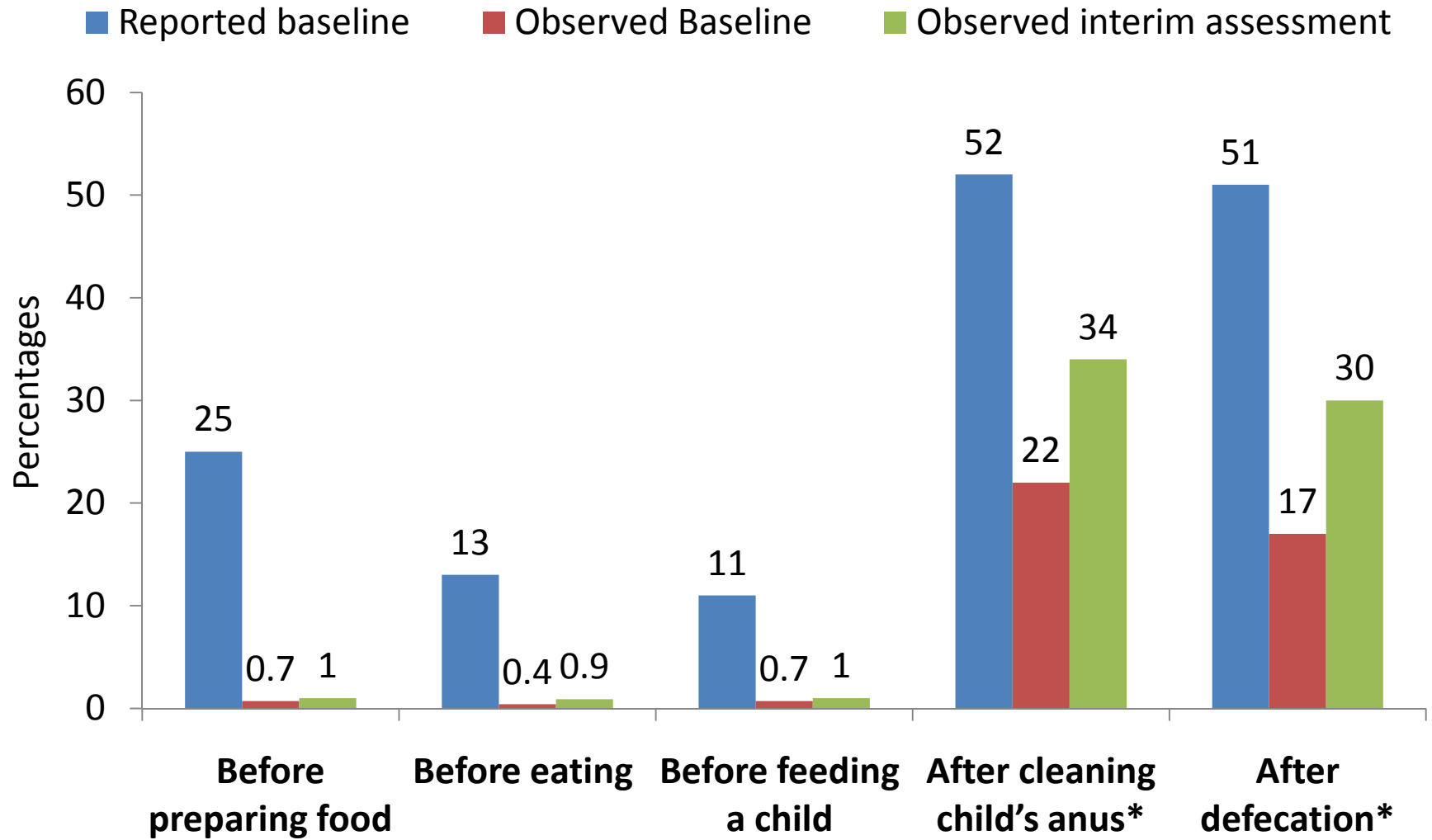
- Assessing morbidity in children under 5 years
- **Measure changes of hygiene, sanitation and water related behavior**



# Methodology of HIS

- Multiple integrated surveys conducted at baseline, interim assessment and midline.
- *Quarterly / monthly Sentinel Surveillance??*
- Sampling: clusters randomly selected
  - Probability proportional to size sampling (PPS)
  - 50 intervention and 50 matched control clusters.
  - 10 to 17 households per cluster

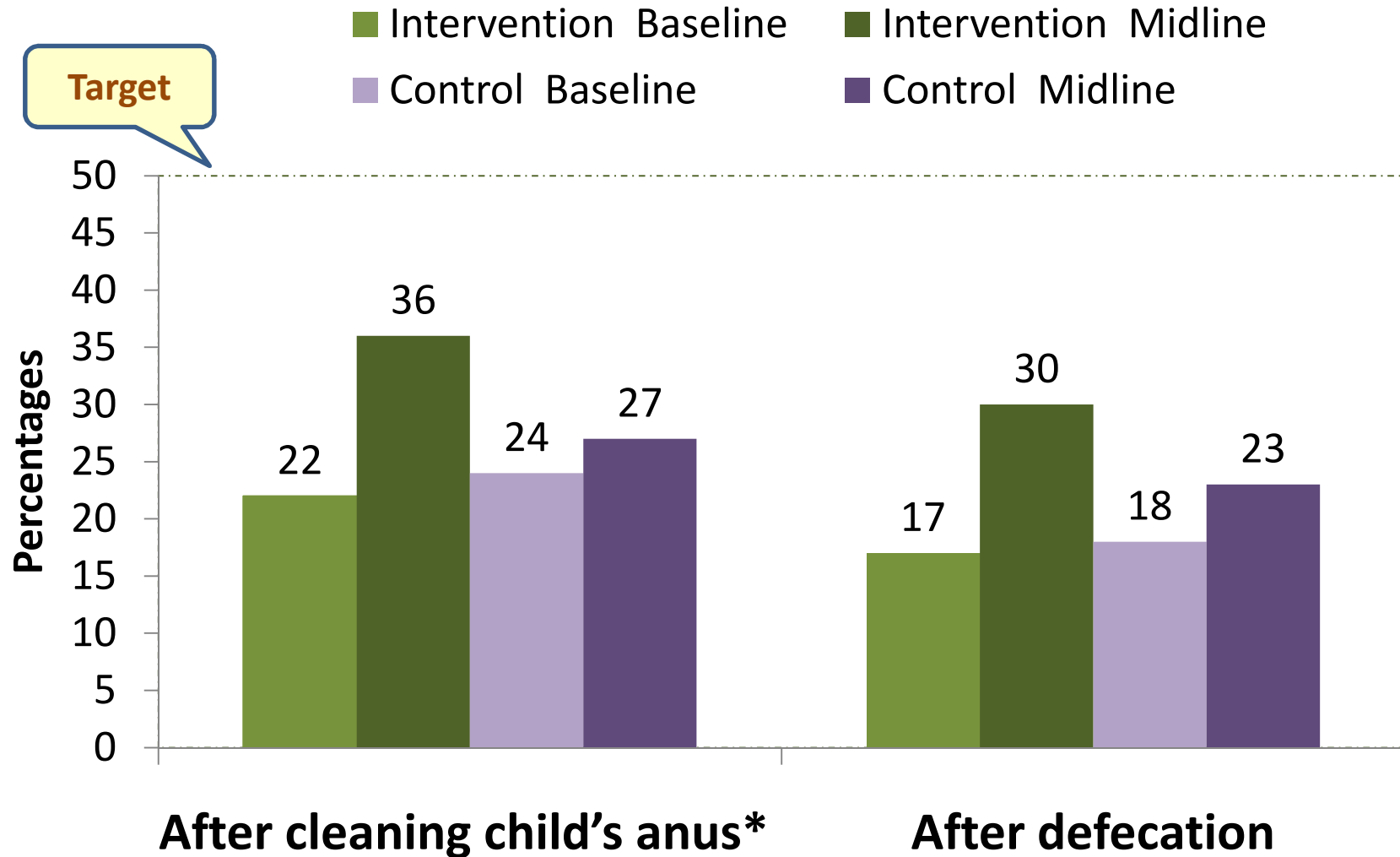
# Washing both hands with soap/ash





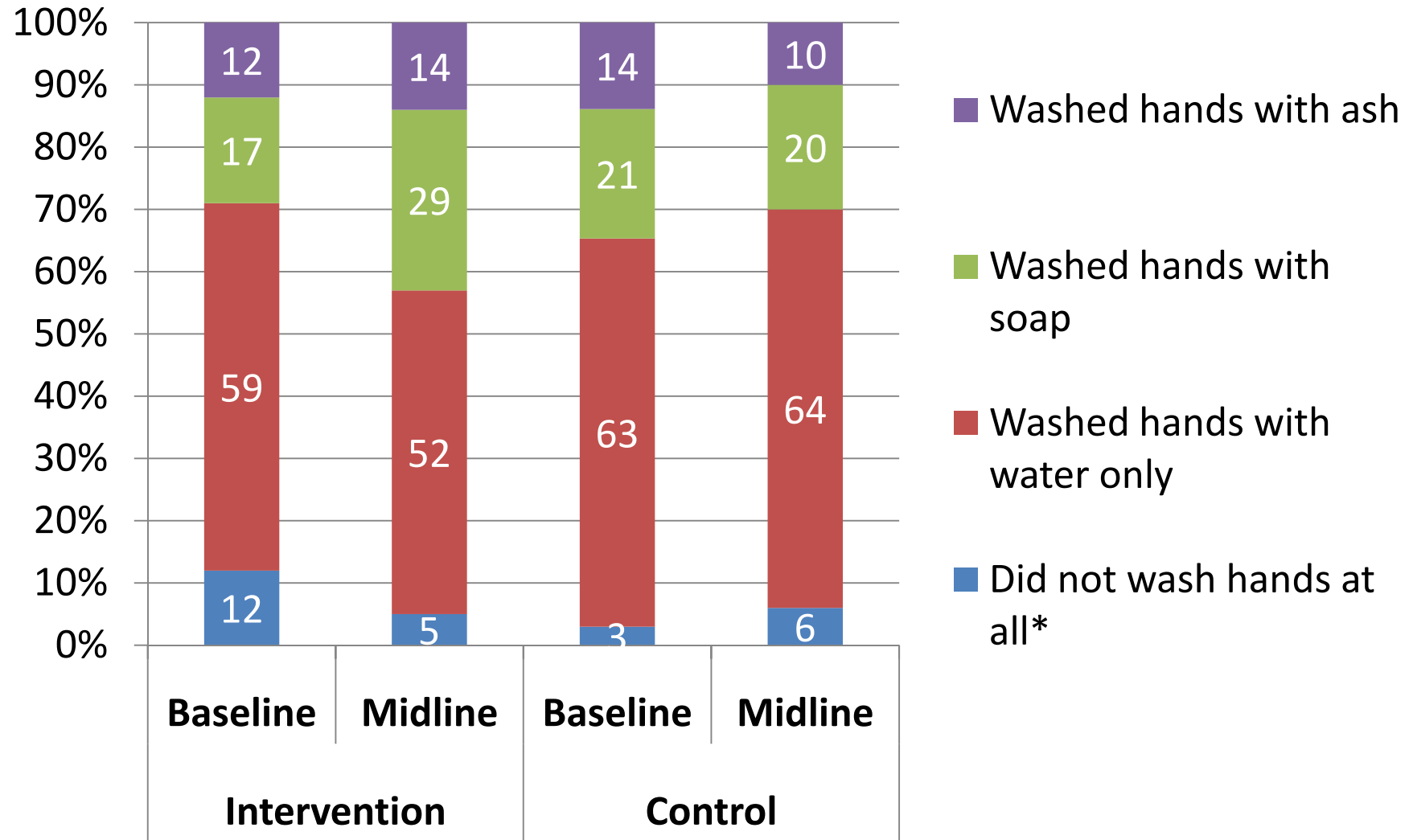
# Washing both hands with soap/ash-Observed

*Data in next slide is not matching!*

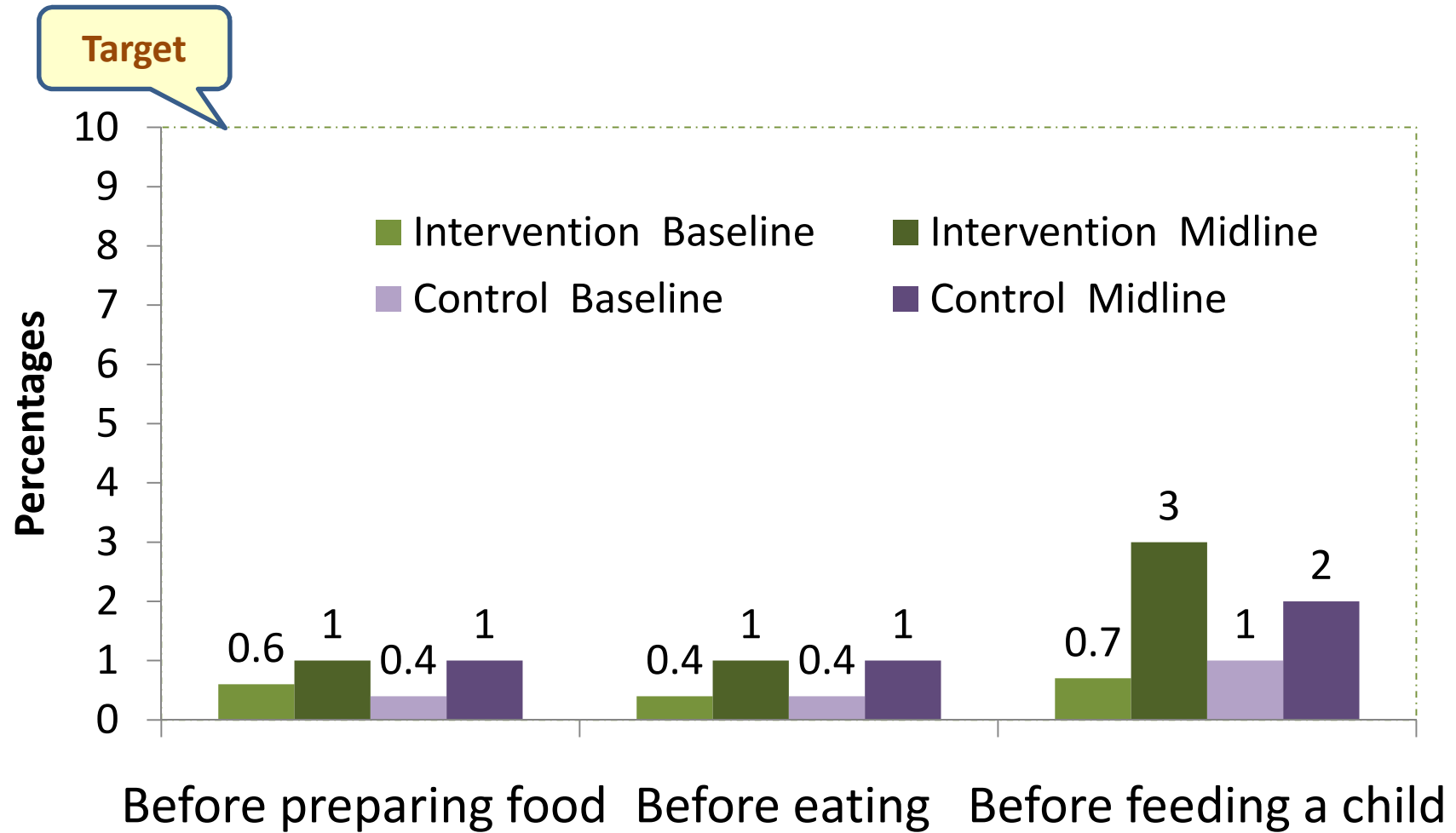


# Washing hands after defecation

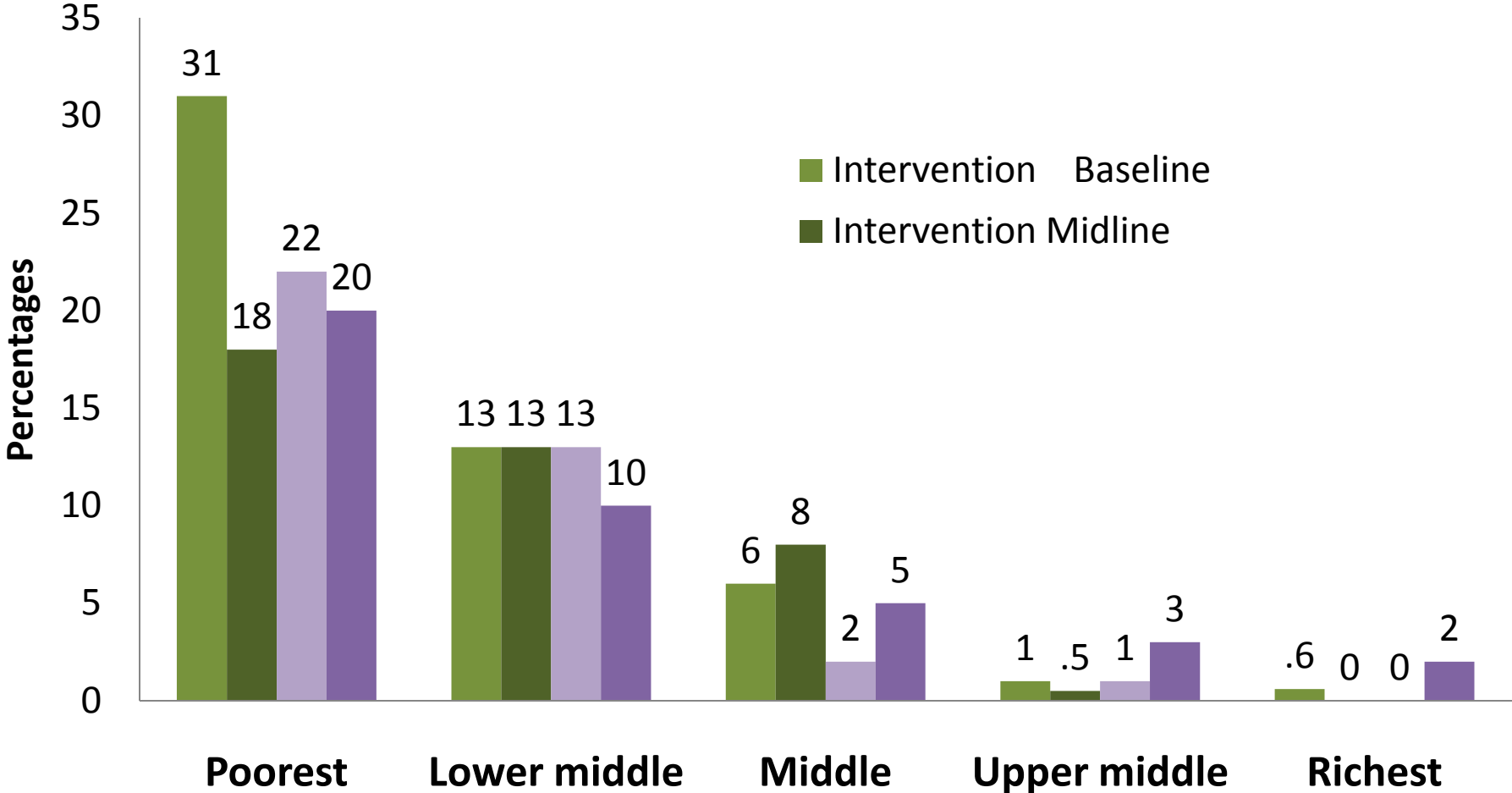
in previous slide handwashing with soap, Intervention went up from 17 to 30 (minor difference only), but for control areas, according to previous slides: 18 at baseline to 23 in midline



# Washing both hands with soap -Observed

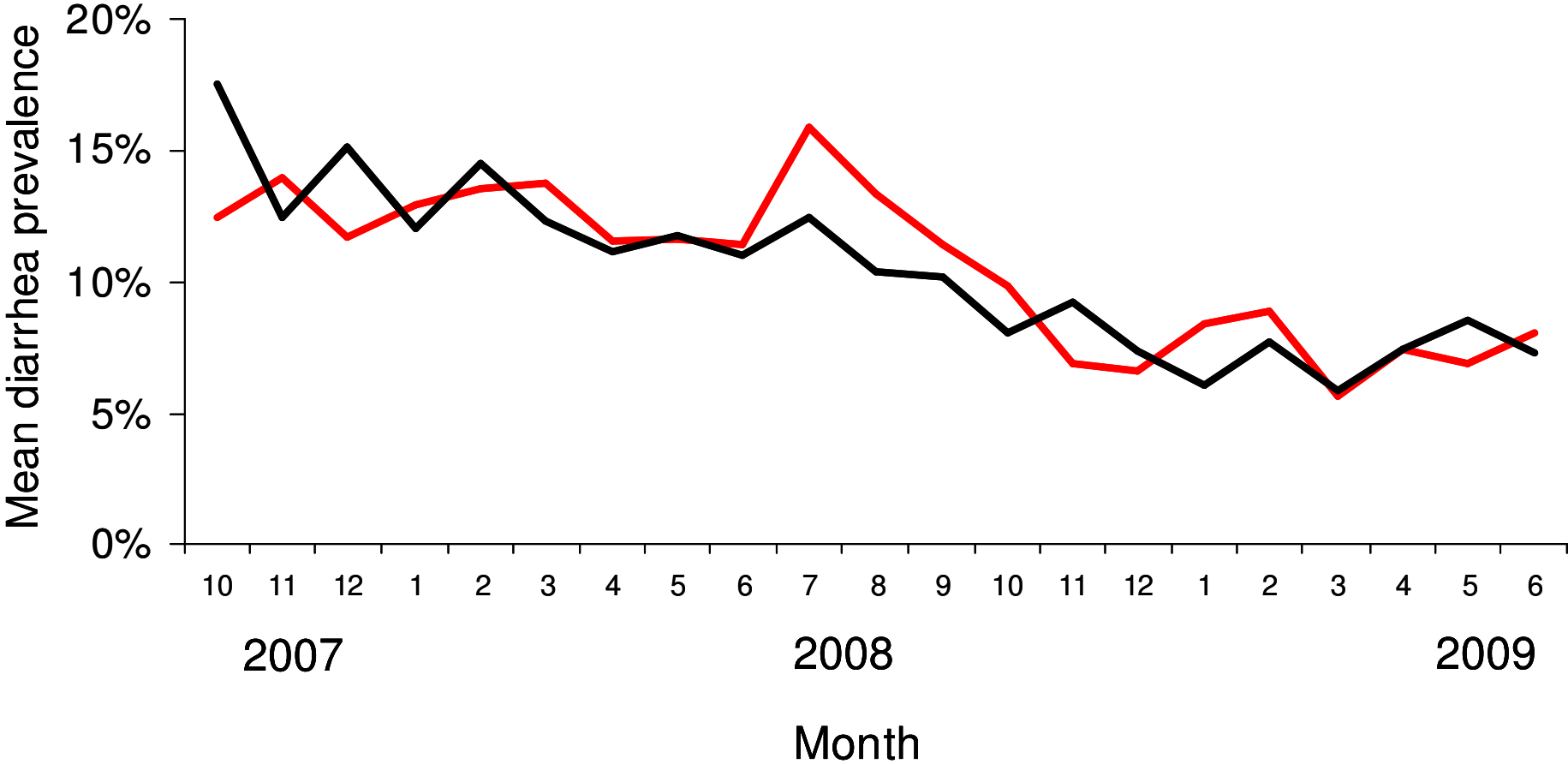


# Open defecation by wealth category



# Prevalence of diarrhea last 48 hours among children < 5 years of age in the intervention and control groups (October 2007 -- June 2009)

— Intervention — Control



# Summary of findings.

- Significant Improvement after cleaning child's anus.
  - But short of the revised target for 2009.
- Progress in Handwashing after defecation but not statistically better than in the control group
  - and is short of the revised target for 2009.
- At the midline fewer than 3% of persons washed their hands with soap before food related events.
  - There was very little change from baseline to midline and very short of the revised target for 2009, set at 10%.
- The progress noted in SHEWA-B areas regarding opendefecation is much sharper within the poorest quintiles (31% at baseline and 18% at midline).
- no difference in the health of children under the age of five years between SHEWA-B and intervention communities

## Overall Summary

- Overall, the SHEWA-B intervention affected a **handful** of targeted indicators.
- These included
  - improvements in hand washing with soap after cleaning a child who has defecated,
  - improvements in sanitary facilities
  - a reduction in the proportion of households that were drinking arsenic contaminated drinking water,
  - A higher proportion recalling hygiene messages.

*In each of the areas of improvement, there is evidence that the **poor benefitted.***

## Overall Summary 2

- The confirmed changes were **quite modest**.
- Big difference between reported and observed practices calls into question the validity of including hand washing questions in surveys.
- These **changes** in the minority of the indicators, even when significant difference from the baseline, were **typically quite short of the program targets**.
- Changes in the intervention community have **not been substantial enough** to lead to a **measurable reduction** in childhood diarrhoea or respiratory disease in the intervention communities.



## Points for discussion

- SHEWA-B behavioural and health targets not yet broadly achieved
  - Intervention design? Or
  - implementation compromised?
  - time?
- Revised intervention, perhaps smaller in scope, based on the analysis of above points?