

Key Findings from the Health Impact Study Baseline Survey May 27, 2008

Methodology: the Health Impact Study (HIS) made a Baseline Survey for the GOB/UNICEF Sanitation, Hygiene Education and Water Supply in Bangladesh (SHEWAB) project. SHEWAB is supported financially by DFID. The Baseline Surveys was conducted by ICDDR,B in 50 upazilas within the SHEWAB area, and 50 paired control areas not having any major project. Surveys were made in Fall 2007 and included both questionnaires and structured observation.

Sanitation: The baseline surveys showed that in the SHEWAB areas **27%** of households were using 'improved latrines' – mainly pit latrines with water seal or lid, or with an offset pit. An additional **47%** were using pit latrines without water seal or lid. Taken together, about **75%** of households were using some form of latrine. This is comparable to the DPHE figure of **85%** national sanitation coverage. One reason that the SHEWAB figure is lower than the DPHE figure is that SHEWAB is at present working only in 60 upazilas, which were chosen for their relatively poor sanitation and hygiene situation. About **13%** of households in SHEWAB areas were using hanging latrines, and another **13%** practicing open defecation, this practice was most common among children and the hard-core poor, at **20-50%**.

Handwashing: while many people surveyed practice some form of handwashing at key times, in most cases only one hand is washed, and only water is used. This type of washing is not effective in removing germs from hands – for this two hands must be rubbed together and soap or ash should be used. Four of the critical times for handwashing to prevent disease transmission are before preparing food, before eating, after cleaning a child's faeces, and after defecation.

Before preparing food. **27%** of people in SHEWAB areas reported washing hands with soap before preparing food, but **less than 1%** of people were seen to do this during the observation. However, about **24%** washed both hands with water before preparing food.

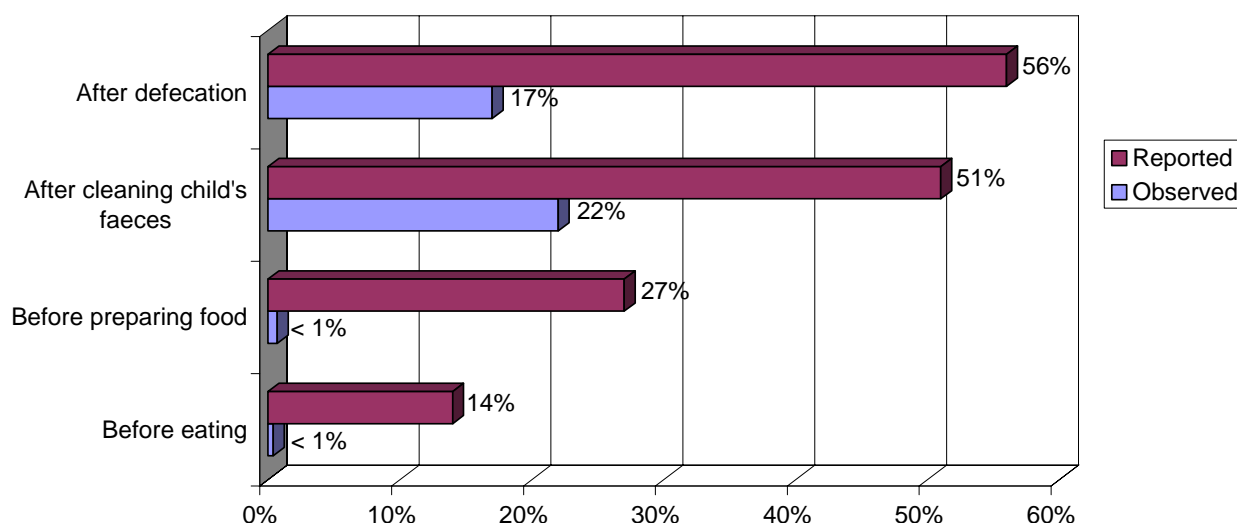
Before eating. **14%** of people in SHEWAB areas reported washing hands with soap before eating, but **less than 1%** of people were seen to do this during the observation.

After cleaning a child's faeces. **51%** of people in SHEWAB areas reported washing hands with soap or ash after cleaning a child's faeces, but **22%** of people were seen to do this during the observation.

After defecation. **56%** of people in SHEWAB areas reported washing hands with soap or ash after defecation, but **17%** of people were seen to do this during the observation.

At all critical times, the hard-core poor households were less likely to wash hands with soap or ash than wealthier households. However, there were no major differences seen between the rich and the middle class. For all socio-economic classes, self-reported rates were much higher than actual practices observed. Use of soap and ash was much lower in the Chittagong Hill Tracts than in the plains.

Handwashing Practices in SHEWAB area Reported and Observed



Water: 98% of people in the SHEWAB area take their drinking water from tubewells. Arsenic is a serious problem, with **41%** of households having water above the WHO provisional guideline value of 10 parts per billion (ppb) and **25%** above the Bangladesh drinking water standard of 50 ppb. **10%** of households had water with more than 300 ppb arsenic. About half of wells found had been tested for arsenic, and **9%** of households had changed their water source because of arsenic. Arsenic levels were much less in the Chittagong Hill Tracts and in control areas outside the SHEWAB area.

Disease Burden: Respiratory and diarrheal illness was common among children in the SHEWAB area. Sixty percent of children under 5 had at least one symptom in the last two weeks, and 2.5% of children had been hospitalized in the last year. Disease prevalence was similar among boys and girls, but boys were more likely to receive care. Taken together these data confirm that diarrhea and respiratory disease are widespread, and suggests that there is sufficient scope to assess differences that the SHEWA-B intervention may bring.

Cost of Care: Costs of hospitalization were high at more than 1000 Tk per event on average. However, outpatient care is much more frequent and accounts for more than 80% of the average cost of 260 Tk per child per year. Among the SHEWAB population of 30 million people, about 137 crore Taka is spent annually on care for diarrhea and respiratory illness.

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