Hygiene behaviour change program in Bangladesh
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The access to safe drinking water and sanitary latrine in rural Bangladesh are 96 per cent and 44 per cent (Progotir Pathey, UNICEF/GOB, 1996) respectively. Despite this apparently satisfactory coverage of water and sanitation, about 250,000 children die due to diarrhea annually. In Bangladesh, more than 350 agencies/organizations are providing hardware facilities for water and sanitation in rural area. However, success in this field has been limited to increased facilities coverage, without significant impact in morbidity and mortality reduction.

In 1993, CARE-Bangladesh developed and implemented a pilot project, "Sanitation and Family Education (SAFE)" in rural Bangladesh. The project focused on diarrhoea prevention by improving hygiene behaviour as related to water and sanitation. Many of the water and sanitation services often have a limited health impact because they are not used, or not maintained properly, or are not accompanied by other hygiene behaviours, such as hand washing, faeces disposal, etc. The objectives of the SAFE project were, therefore, to develop effective, replicable hygiene education strategies to promote behaviour change, to develop and assess different models for hygiene education outreach, and to design and implement a behaviour-based monitoring and improvement system for a hygiene education program. For achieving these objectives, community participation is considered as the key strategy, and followed in every aspect of the SAFE pilot project.

Methodology
The SAFE pilot project also compared two models of outreach. Model-1 is based on courtyard education sessions with the tubewell caretakers, their spouses and tubewell users. Model-2 includes additional outreach activities: school programs, child-to-child approaches, and involvement of key opinion leaders in the community. The purpose of this comparison was to determine the benefit of a more intensive outreach program to influence hygiene behaviours.

Based on the findings from the baseline surveys and initial qualitative studies, SAFE interventions were developed. The areas of interventions are: clean water, latrine use and faeces disposal, environmental cleanliness, hand washing, food hygiene, and diarrhoea management.

Control areas without intervention for both model 1 and model 2 were maintained to measure/compare the impact of interventions in the model areas.

The success of SAFE was based on a well-designed, community-centred process approach, which emphasizes:

Full involvement of the person who is changing his/her behaviour
The full involvement of the of the people in all aspects of the process of change is essential for sustained behaviour change. In SAFE pilot project, the community was involved in every steps of the project, this means involvement in planning, implementation and evaluating change. The community themselves identify the opportunities and constraints to behaviour change. This way the community did not felt to imposed from outside.

The establishment of link between behaviour change and personal benefits
Benefits of change must be clear and relevant to the person trying to change behaviour. For example, some community people may feel that using a latrine is much better than suffering repeated episodes of diarrhoea. Others may link improved hygiene behaviour with saving time spent caring for children with diarrhoea. Some also linked diarrhoea with poverty, when their children got diarrhoea they had lend money to cure their children.

It was observed that who are using hanging latrine and their children were regularly ill. When they started using pit latrine, their children are healthier and consequently social status has increased.

Behaviour change should progress in realistic and manageable steps
In SAFE, the progress of the behaviour change was done step by step instead of achieving a perfect behaviour first. Behaviour change was focused on most risky behaviour first. Nobody should be expected to "change over night". Small incremental steps to change should be encouraged. The community people were prioritizing the most risky behaviours which they feel need to be changed. For example, although the hygienic water seal latrine is best to prevent diarrhea but, since the people were very poor, SAFE field staff were asked to prepare a pit latrine first. To ask these poor people to use water seal latrine is useless because they can't afford. Again, expecting community to use tubewell water for all purpose will be unrealistic if they lives far away from the tubewell. Therefore, in SAFE it was considered that the community will reduce risk of diarrhea...
considerably if they at least drinks tubewell water exclusively.

**Multiple channel for strong supportive environment for change**

In SAFE project to create a strong supportive environment multiple channel was used. Through this multiple channel the total community was reached.

The different approaches used in SAFE for reaching the target group in Model area:

- Courtyard session
- Childrens session
- Male orientation
- Tea-shop session
- Key community persons.

**Behaviour-based monitoring and evaluation system**

The system identifies what people actually do rather than what they say they do. For example, regular observations of households, individuals, at pond or tubewell sites were carried out to examine actual hygiene practice. Community members were encouraged to be involved in the monitoring activities (e.g. observing behaviour, children counting faeces inside and outside the yard etc.).

Focus group discussions and key informant interviews were conducted. Monitoring information on existing behaviours was visualized in the form of maps and bar charts which were readily understood by villagers. These formed the basis of discussion about change and future plans to gear up the program. Field workers shared their observations with the villagers and together they analyzed the reasons for the gap between knowledge and practice and identified the constraints preventing the adoption of behaviour change. The program was thus modified on an ongoing basis according to the discussions and suggestions.

**Locally appropriate solutions**

In SAFE, project staff worked out jointly with the community and therefore consistent with local realities, values, beliefs and practices. SAFER field trainers were selected from the locality. They were trained to be facilitators so that they could help communities to assess their present situations and examine options for improvement themselves.

Information from outside that may not fit with the social norms of the particular community. Members from community regarded as the most reliable and trusted sources. Those who have changed behaviour themselves and can share their experiences are particularly important in supporting change to others.

**SAFE achievements**

The dramatic impact of SAFE approach on diarrhea reduction is of critical importance in Bangladesh, where diarrhea counts for a quarter of under five mortality.

Baseline survey were conducted in Model 1 and 2 areas and nearby control areas before the intervention began (in May 1993). In May 1994, final evaluation of the SAFE interventions was held. Dramatic improvements were seen in all areas of interventions: knowledge, reported behav-

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Model I</th>
<th>Model II</th>
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<tbody>
<tr>
<td>Knowledge on <strong>Diarrhea Prevention</strong> (All 5 Areas1 Mentioned)</td>
<td>13% 0***</td>
<td>54% 0***</td>
</tr>
<tr>
<td>Tubewell Water Contaminated by Pond Water</td>
<td>2 67***</td>
<td>1 47***</td>
</tr>
<tr>
<td>Stored Drinking Water is Kept Covered</td>
<td>100 94*</td>
<td>98 90**</td>
</tr>
<tr>
<td>Reported Use of Latrine or Fixed Place by Children 3 to 5 Years</td>
<td>91 27***</td>
<td>90 24***</td>
</tr>
<tr>
<td>Access to Hygienic Latrine</td>
<td>53 23***</td>
<td>88 11***</td>
</tr>
<tr>
<td>Environmental Cleanliness (No Feces Lying Inside Latrine)</td>
<td>88 53***</td>
<td>99 85***</td>
</tr>
<tr>
<td>Hand Washing Technique (All 5 Key2 Elements Demonstrated)</td>
<td>74 3***</td>
<td>82 16***</td>
</tr>
<tr>
<td>Reported Feeding <strong>Normal Food</strong> During Last Episode of Diarrhea</td>
<td>87 59***</td>
<td>97 80***</td>
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SAFE Intervention vs. Control: *p < .01 **p < .001 ***p < .0001

1 Clean Water; Latrine Use and Feces Disposal; Environmental Cleanliness; Food Hygiene; Hand Washing
2 Uses Water; Washes both hands; use/soap/ash/mud; rub hands at least 3 times; use a clean rag or air dries hands after washing.

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**Table 1. Summary of few key achievements in SAFE**
ior, demonstrated practice and observations. In addition, an estimated two thirds reduction in diarrhea prevalence was seen in SAFE intervention areas. These results provide very strong evidence that the SAFE approach can be effective in improving hygiene behaviours and reducing the incidence of diarrhea in children. The following table shows the demonstrated key behaviour change in both model 1 and model 2 compared to their corresponding control areas.

**Conclusions**

SAFE experience showed that behaviour change programming accompanied by adequate facilities coverage is a very effective approach to have an impact on diarrheal disease reduction and to promote sustained behaviour change. A critical element for successful behaviour-change program is to combine individual empowerment with peer/group support and pressure that would lead to adoption of newly established community norms. Once the benefits of changed behaviours is already perceived and visible for both the individual and the community, it is likely that those new norms will be sustained.

The expansion of SAFE approach for hygiene and sanitation behaviour change could be of dramatic importance for the reduction of diarrhea related morbidity and mortality in Bangladesh. Moreover this approach is acceptable to any program focusing on community behaviour change.

**References**


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