Experiences since Alma-Ata

Implemary Health

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Chapter 9

Empowerment through health education: the approach of an NGO in Bangladesh

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This paper describes a health programme in Bangladesh that is distinct in many respects. Instead of providing curative services, this programme is educational in essence. It works with the community in raising awareness, empowers people through transfer of knowledge and technology, creates demand for health care and services and activates the existing service system to cater to this increased demand.

Before describing the present programme, we will provide a quick look at the organisation that carries out this programme, and at some of the health activities undertaken in the past.

Bangladesh Rural Advancement Committee

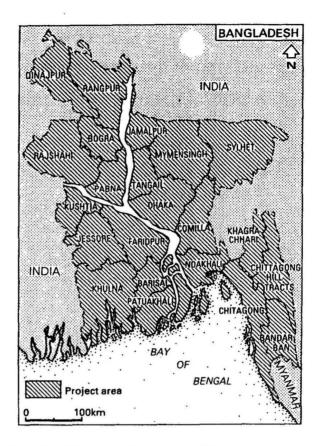
The Bangladesh Rural Advancement Committee, or BRAC, is a Bangladeshi non-governmental organisation. Established (in 1972) and managed by Bangladeshis, BRAC has grown into a large organisation, with 3,000 full time staff and branches in many parts of the country. It provides many development programmes in areas including education, credit and income generation, institution building, women's development, agriculture, small industry, training, and research. Health is also an important component, which accounts for about 35 percent of BRAC's US\$ 8 million (1988) annual expenditure. Since 1972, BRAC's health care activities have gone through various stages, which will be briefly discussed.

Prior to 1980: the Sulla experience

Health has been an important component ever since the inception of BRAC. In the first project - in the Sulla region (of the former Sylhet district), a remote area in the Northeast of Bangladesh - BRAC tried out different health care methodologies, including both curative and preventive approaches. Two programmes tried out in Sulla will be briefly discussed.

In order to provide easy and affordable health care to the community, a scheme was started that allowed villagers to take part in an insurance scheme for all family members, in return for a token fee. Households paying one kilogram of pre-husked rice per person were insured for one year. This scheme was later discontinued, since

BANGLADESH 113



evaluation revealed that only the well-to-do villagers took advantage of the scheme. To the poorer villagers, health was not an immediate priority for investment.

Family planning was another programme established by BRAC in Sulla. Village based female family planning workers were recruited and trained to motivate and to distribute non-clinical contraceptives, particularly a pill used orally. Although the contraceptive continuation rate was quite high for any project active at that time in Bangladesh (Chowdhury and Chowdhury, 1978), the project was not able to recruit more than 20 percent of fecund couples. It was concluded that 'couples will not necessarily limit their family size unless some basic needs, such as economic, social and cultural, are met' (Chowdhury, 1978).

1980-1986: the ORT Programme

In 1980, BRAC undertook a programme to teach all mothers of rural Bangladesh the use of oral rehydration therapy (ORT) for diarrhoea. Research conducted by BRAC found that a 'safe and effective' oral rehydration salt (ORS) solution could be made by mothers at home with home ingredients to treat their children's diarrhoea. A pilot project in the Sulla area also found that mothers could be effectively trained by specially trained female health workers (Ellerbrock, 1981). Based on these results, a nationwide programme was launched, which was intended to cover the whole country by 1990. By

114 IMPLEMENTING PRIMARY HEALTH CARE

September 1986, health workers had visited and trained mothers in eight million households, mor an half of all the households in Bangladesh. More details regarding this programme, including its innovativeness (such as salary incentives for its workers) are given by Abed (1983).

How successful has this programme been? In scale it is the largest ORT programme in the world. No other programme has tried to teach so many mothers individually. This is also one of the few programmes that has been extensively researched. Monitoring visits to mothers one month after teaching found a high level of retention of knowledge: 90 percent of the mothers were preparing a solution in the range considered scientifically 'safe and effective' (with a sodium concentration in the range of 30 to 99 mmol/l). What is the retention after a longer period? Later studies found similar results up to six months following teaching (Chowdhury, 1982). However, knowledge was found to drop off 12 or 24 months after teaching (Chowdhury, 1986a; Chowdhury et al., 1988). This led BRAC to review its programme. New programme elements such as media advertisements and a change in teaching methodology were introduced. Recent results show that the problem has been corrected; mothers taught 12 months previously were capable of preparing 'safe and effective' solutions.

The extent of ORT usage has also been investigated. Although the average use for all types of mild, moderate and severe diarrhoea was low, it was encouragingly high in severe cases, with up to 55% of severe diarrhoea cases using the solution (Chowdhury et al., 1988; Chowdhury et al., in press). This is more important, as ORT is more useful in rehydration, and only severe cases lead to dehydration and death.

The impact on mortality has also been investigated. This suggested a significant impact of this programme, but due to methodological limitations this finding remains inconclusive (Chowdhury, 1987).

Many other aspects of this programme have been studied, including cost, perceptions, and constraints; these are available elsewhere (Chowdhury et al., 1988; Chowdhury, 1986a; Chowdhury, 1986b).

The present programme

Projects. The ORT programme was a success in many respects. It took BRAC to the doorstep of more than half of Bangladesh's households, which provided self-confidence. Although diarrhoea is one of the major killers in childhood, there are others whose contribution to total child mortality and morbidity is no less significant, and for which proven interventions are available. These include the six diseases for which vaccines are available. Further, vitamin A deficiency is acute in rural Bangladesh (Helen Keller International, 1985). Considering this, BRAC decided to include these two interventions in its ORT programme, which resulted in renaming the project OIA (for ORT, immunisation and vitamin A). With respect to the latter two elements (immunisation and vitamin A), BRAC decided to contribute by creating awareness and demand for immunisation and vitamin A capsules and by promoting production and consumption of foods rich in vitamin A. As both immunisation services and vitamin A

BANGLADESH 115

necessitate a continuous supply line, BRAC also decided to help the government strengthen its system, by providing training to lower and mid-leve. rkers.

This programme started in October 1986, and will cover the last one-third of the country by 1990. Besides house-to-house teaching of the three elements, a media campaign has also been launched via radio and television, to supplement door-to-door activities.

To develop a system that will include other features of PHC, as enunciated in the Alma-Ata declaration, a primary health care programme was started in five *upazilas* (sub-districts, each with 2,000,000 population) in October 1986. In addition to ORT, immunisation and vitamin A, the project sought to cover other areas of PHC such as training traditional birth attendants, nutrition education, safe water and sanitation, family planning and basic curative care. All these elements are educational in nature and tend to raise awareness and create demand. BRAC does not provide any services on the supply side; rather it tries to work as a link between the villagers and the government system, which is available but mostly remains unused.

To ensure participation and continuity, BRAC has been trying to form village health committees and mothers' clubs. Although many of these institutions have been formed and some are working, more time will probably be required to assess their real effectiveness. The VHCs have equal male and female representation.

Staff training. Training for the staff is both in-service and in classrooms. Initially, at the ORT programme stage, front-line female health workers were selected from their native districts. This has been discontinued; they are now selected from all over Bangladesh. Their supervisors, who are male, are selected nationally. In the initial stage, health workers are given training, the duration of which depends on the nature of their responsibilities. Thereafter these staff are sent to the field, where they are constantly monitored and provided with feedback on their performance. Refresher training is also arranged once or twice a year. Most training is conducted at the BRAC Training and Resource Centre, in collaboration with the programme.

Monitoring and Evaluation. Monitoring of the programme is done by the programme staff. Each component of the programme has its own monitoring indicators. This monitoring is continuous, and is fed back for programme and staff development.

Evaluations, both formative and summative, are done by the Research and Evaluation Division, an independent unit within BRAC. Results from these evaluations are fed back to the programme. Those of wider interest are published in national and international journals. A list of health programme evaluations done in 1987 are given in Table 1.

Funding. Most of the funding for BRAC comes from overseas donors, including NGOS, multilateral agencies and governments. For example, the present health programme is funded by the Swedish International Development Agency (SIDA), Swiss Development Cooperation and UNICEF.

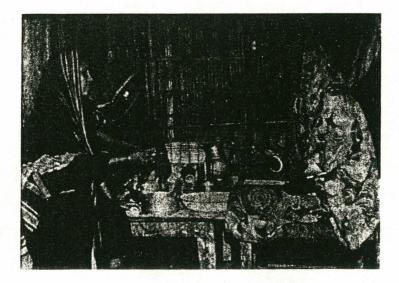
116 IMPLEMENTING PRIMARY HEALTH CARE

Discussion

BRAC health programmes initially had a curative bias, which has now been reversed. This has been done for two primary reasons. First, the experience that most such services do not reach those most in need - the poorer sections. Second, the realisation that such curative services need a constant supply line, which an NGO like BRAC cannot ensure in the long run. The BRAC programme has thus evolved into an educational programme, which tries to empower the people to manage their own health, either by themselves or with help from the government. To ensure continued government services, the people will need community institutions such as village health committees, which can demand these services if they are not forthcoming. This empowerment approach is being implemented by using three types of resources, as seen in Table 2.

Most of these empowerments, except ORT, have started only recently; it is probably too early to pass any judgment about their effectiveness. The outcome of the ORT programme is well documented, and the results of a survey of initial coverage of immunisation are encouraging. Detailed research is underway to monitor the effectiveness of these strategies.

Good health will follow when both the people and the government agree to and are able to perform their responsibilities. In this process, an NGO can play only the role of a catalyst. We feel that good and sustainable PHC can be implemented only by governments. However, NGOs can play a very important role in hastening the process, both through an educational programme and by helping governments to strengthen and streamline their systems. A larger and more sustainable impact can then follow.



Health worker (right) teaching mothers how to make a solution to combat diarrhoea

BANGLADESH 117

Table 1. 1987 health programme evaluations carried out by BRAC Research and Evaluation Division

- 1. 'Indicators for Evaluating Village-level Organizations'. This methodological paper gives a checklist of indicators necessary in studying village-level organisations (28 pages).
- 2. 'Review of BRAC's Nutrition Centre at Betila, Manikganj'. A first review of the nutrition centre, which has been functioning for several years. It identifies the strengths and weaknesses in the planning and implementation policies and recommends future policies (69 pages).
- 3. 'A Manual on Cause of Death Reporting by Non-medical Interviewers' (draft). A manual intended to be used by non-medical interviewers who are currently registering vital events in different locations as part of monitoring impact of health programmes (26 pages).
- 4. 'The Health, Family Planning and Nutrition Programme of Manikganj Integrated Project'.

 Documentation of the various programmes of the Manikganj project on health, family planning and nutrition (30 pages).
- 5. 'The Child Survival Programme A Report on a Pilot Experiment in Sonargaon Upazila'.

 Documentation of the pilot project done prior to the launching of the Child Survival Programme; reports on ORT teaching and immunisations (BCG, TT, DPT, Polio and Measles) (26 pages).
- 6. 'Comparative Community Study on the Safety and Acceptance of Rice-based and Gur-based ons Interim Report on the Implementation of Teaching Programme'. A report on experiences in teaching gur-based and rice-based ons methods to mothers in three different areas. This deals particularly with the cost of the programme (36 pages).
- 7. 'Teaching ORT to Mothers Individually or in Groups?' A research report on a study comparing the outcomes of teaching ORT by two different methods (9 pages).
- 8. 'A Study on Perceptions About Six EPI Diseases and Vaccination'. This report is the result of an indepth study in 8 villages of Manikganj and Joypurhat districts, which looked at perceptions of villagers of the six EPI diseases and vaccination. The implications of such perceptions for the Expanded Programme on Immunisation (EPI) in Bangladesh are discussed (31 pages).
- 9. 'Mortality Effects of the BRAC ORT Programme in Rural Bangladesh: An Assessment of the First Phase Experience'. A first report on the study, initiated in 1981 to measure the impact of BRAC's ORT programme on infant and child mortality (21 pages).
- 10. 'An Assessment of the Tetanus Toxoid Immunization Programme in Two Villages of Manikganj Project'. This report evaluates the coverage of the programme in Manikganj prior to undertaking a broader immunisation programme against the 6 EPI diseases, and looks at reasons many women were not immunised (9 pages).
- 11. 'The Vitamin A Capsule Distribution Programme: A Coverage Survey in Six Rural Areas of Bangladesh'. A report on the survey done following the June-July 1987 distribution cycle of vac in six unions of the districts of Manikgani and Joypurhat (7 pages).
- 12. 'The Primary Health Care Programme of BRAC: Some observations from a trip to Santhia Upazila'. A spot observation report discussing the problems of the PHC programme and particularly focusing on the village health committee, the Shastha Shebika (village health worker), growth monitoring and the question of involvement of doctors in the programme (14 pages).
- 13. 'Incentives for Family Planning: A review of Experiences and Their Relevance for BRAC'. A background paper prepared for a workshop on 'Family Planning Incentive Schemes for BRAC'.
- 14. 'Provision of Old Age Security for Sterilization Acceptors: Draft Proposal for a Pilot Project' (14 pages).
- 15. 'The ORT Programme in Bangladesh: Description, Evaluation Methods and Results'. A paper prepared for the First Meeting of the Community Epidemiology/Health Management Network (30 pages).
- 16. 'An Evaluation of Two Rehabilitation Projects of Assistance for Blind Children (ABC)'. An evaluation, done at the request of ABC, of two of their projects for blind children (50 pages).
- 17. 'Use of colostrum in Rural Bangladesh'. The importance of colostrum is well established in medical science. However, very little research has been done on colostrum in Bangladesh. Covers e.g. how Bangladeshi rural mothers think about colostrum and whether it is used to feed babies (11 pages).

able 2. Implementation of health empowerment approach

Type of resources used	Type of empowerment
A. Local	1. ORT knowledge
	2. Personal hygiene knowledge
	3. Nutrition knowledge (identification
	and home treatment of malnourishment;
	home gardening etc.)
	4. TBA training
	5. Sanitation knowledge
B. Government	1. Immunisation
	2. Vitamin A capsules
	3. Family planning
	4. Basic curative
	5. Safe water
C. Community (village health committee)	1. Ensure continuity of the process

References

Abed, F.H., 'Household teaching of ORT in rural Bangladesh'. Assignment Children, vol. 61-62, (1983).

Chowdhury, F.I., and A.M.R. Chowdhury, 'Use pattern of oral contraceptive in rural Bangladesh: A case study of Sulla'. Bangladesh Development Studies, vol. 6 (1978).

Chowdhury, A.M.R., 'Family planning in the context of integrated rural development'. Paper presented at the symposium on 'Innovative projects and rural institutions'. Dhaka, National Institute of Population Research and Training, 1978.

Chowdhury, A.M.R., 'The retention of knowledge about homemade ORT in rural Bangladesh'. Bangladesh Paediatrics, 1982.

Chowdhury, A.M.R., 'An evaluation of a community based ORT programme in rural Bangladesh', 1986 (a). (PhD thesis, University of London.)

Chowdhury, A.M.R., 'Evaluation community ORT programmes: indicators for use and safety'. *Health Policy and Planning*, vol. 1, 1986(b).

Chowdhury, A.M.R., 'Mortality effects of the BRAC ORT programme: an assessment of the first phase experiences'. Dhaka, BRAC, 1987 (unpublished).

Chowdhury, A.M.R., Vaughan, J.P. and F.H. Abed, 'Mothers learn how to save the lives of children'. World Health Forum, vol. 9, 1988.

Chowdhury, A.M.R. et al., 'Use and safety of ORT: an epidemiological evaluation from Bangladesh'. *International Journal of Epidemiology* (in press).

Chowdhury, A.M.R., Karim, F. and J. Ahmed, 'Teaching ORT to women: individually or in groups?' Journal of Tropical Medicine and Hygiene (in press).

Ellerbrock, T.V., 'Oral replacement therapy in rural Bangladesh with home ingredients'. Tropical Doctor, 1981.

Helen Keller International. Bangladesh Nutritional Blindness Study 1982-1983. New York: HKI and Institute of Public Health Nutrition, 1985.