A model for health education

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A model for health education has been devised in Egypt on the basis of studies made in two villages. Its purpose is to contribute to the solution of environmental health problems by using locally available resources. Present indications are that the model will be applicable not only to the different sectors of the population, e.g., women and children, but also to many other villages throughout the country.

Health education messages in the mass media are frequently valuable in creating an awareness of problems but do not always result in improved behaviour or the consolidation of healthy behaviour. In Egypt there has long been a need for a model of community health education which identifies appropriate materials and methods.

Such a model has now been developed on the basis of a health education programme and evaluation in two villages of 4000 and 5000 people in the Nile delta. Both villages had access to piped water, shallow wells with handpumps, and canal water; the latter was used by some families for domestic purposes, such as washing clothes and dishes. There were no sewage, solid waste or soilage disposal systems. Water-related gastrointestinal and eye diseases were the most widespread illnesses of children. There was a perception among the villagers that drainage presented a more important problem than water supply. In these circumstances there were clearly serious matters of hygiene and environmental health to be considered.

Beliefs and practices relating to health were observed (1, 2), and educational messages and materials were then prepared and tested over a two-year period. Training was provided for more than 80 educators, and health education was received by more than 1000 women and 400 schoolchildren. The local people were involved at all stages so as to ensure that messages were acceptable and that recommended behaviour was feasible. Collaboration took place between government agencies at the village, markaz (district) and governorate levels, the personnel of which acted as planners, trainers, educators and monitors. The process of health education comprised the following main activities:

- identification of health problems and of health-related behaviour and its rationale;
- design and pretesting of messages and methods of communication;
- identification of the target audience;
- selection and training of health promoters;
- education to encourage healthy behaviour;
- evaluation to ensure feedback and sustainability.

The strategy employed was based on simple hygiene messages delivered in health units,
schools and people's homes. The 85 health promoters, who worked on a voluntary basis but nevertheless received small monetary incentives, included:

- female nurses who had undergone two years of training after leaving secondary school and who contacted mothers in health units;
- primary school teachers, two of each sex having been trained in each school, who worked with students in summer camps;
- public service candidates, who were new female graduates that had volunteered for community service;
- informal women leaders, the majority of them illiterate, who reached women in their homes.

The training and educational sessions were informal face-to-face meetings involving groups of five to ten people.

Messages and materials

Local people collaborated in the preparation of simple health messages that reflected village life and recommended behaviour requiring little or no expenditure of money. The links between behaviour, disease transmission and environmental sanitation were emphasized. Specific matters receiving attention included water and food storage, infant feeding, hand washing, food preparation, latrine cleanliness, kitchen hygiene, the separation of living areas from livestock accommodation, and the use of dung as a fuel.

The validity of the messages extends far beyond the two villages in the study. Throughout rural Egypt, diarrhoeal disease remains the principal cause of death among children under five years of age, and consequently the advice given on hand washing, for example, is widely applicable. Such advice could undoubtedly be given to advantage together with messages about oral rehydration therapy. Recommendations on washing children's faces, maintaining a state of cleanliness in the home, and keeping livestock away from living areas could help to control eye diseases among children. With regard to schistosomiasis, which affects 15–20% of the rural population, messages concerning the use of canals for domestic purposes and swimming could have a preventive function.

A teaching guide used in summer clubs relates drama, art and story-writing to the theme of environmental health. A training booklet for health promoters was prepared, and at the end of the project an illustrated booklet entitled Guide for trainers: health and the environment was published, presenting, as a basis for discussion, all the messages previously offered.

Training methodology and schedules

All training was informal, relying on group discussion and audiovisual aids rather than lectures. However, a range of schedules and techniques was employed because the hygiene promoters were not uniform in terms of education, experience and social functions. As far as possible, training sessions were held in the settings in which the messages would be delivered.

1 Copies of educational materials are obtainable from Samiha El-Katsha.
Health unit staff and the public service candidates participated in short presentations, each followed by discussion. On-the-job training was then provided on how to reach women in large and small groups and on the use of audiovisual aids. The informal leaders took part in two initial group sessions and subsequently received on-the-job training in the use of audiovisual aids in household settings.

Literate hygiene promoters were trained in record-keeping for the purposes of monitoring, follow-up and evaluation. Illiterate promoters were individually counselled and encouraged to describe in a systematic way the activities they had undertaken; this meant training them to divide their work mentally into separate areas.

Training for the teachers took place before the summer camps began. Gaps in their knowledge were identified by pretesting. Two training sessions were held, one dealing with basic health information to be communicated to children, the other with methods of communication.

The educators were evaluated during and at the end of the initial training session in order to see how well they had retained the information imparted.

The results were discussed with them so that they could improve their performance and, if necessary, modify the messages. The public service candidates attended the training sessions for teachers and monitored the summer school programmes, the progress of which was discussed by these two groups in joint fortnightly meetings.

**Targeting**

Women comprised the target audience for nurses and public service candidates because of their involvement in the collection, use and disposal of water and because they were responsible for the care of families, the houses they lived in, and their surroundings. Special attention was paid to women aged under about 40 because of their role in child care and their extensive use of canal water for domestic purposes.

The nurses provided health education for women in health units. If a woman attended with a child suffering from diarrhoea, for example, a nurse might take the opportunity to discuss with her and other women present the causes of the condition, to ask them what they knew about it, and to suggest simple preventive measures such as covering food and water, washing vegetables, and keeping the hands clean. Nurses holding discussions with larger groups were especially encouraged to use audiovisual aids.

The nurses were the most successful health educators in terms of their retention and communication of information and the changes in women's behaviour which they helped to bring about.

Each public service candidate worked in the same small densely populated village section throughout her year of service. Part of the familiarization process entailed taking a detailed census that permitted the identification of environmental problems requiring special attention during health promotion. Initially, information on hygiene was passed on to groups of women in local settings, but

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later each educator selected five households at a time, observed hygiene-related behaviour therein and then conveyed any messages that seemed desirable.

The informal leaders worked primarily with women in their own neighbourhoods, concentrating initially on the use of audiovisual aids and on encouraging group discussion. Later, hygiene messages were delivered whenever women were observed to be behaving in an unhygienic manner, whether in markets, streets or fields. These activities were reportedly effective and in fact they continued after the programme had officially ended.

In the summer clubs, discussions were held on personal hygiene, food handling, environmental sanitation, and disease transmission and prevention. New ways of reaching children with hygiene messages were introduced to the teachers. The clubs were organized twice a week over a two-month period and were attended by children aged from 10 to 12 years, the girls among whom often communicated health messages to their mothers while helping with household tasks. The means of communication included games, songs, drawing, role-playing and audiovisual aids. Simple materials, readily available in the environ-

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ment, were employed for these activities. Children were encouraged to pursue their special interests during the second session of each day, among them acting, art and music.

**Resource needs**

The model can be planned and implemented using local staff, expertise and finance. Nurses in health units can provide education to women who are waiting to see doctors. Doctors and nurses can also act as trainers for nurses, public service candidates and teachers. In Egypt, staff in health units are often underutilized and they welcome the opportunity to become health educators.

Some funds are available in most Egyptian governorates to pay teachers in summer clubs, where recreational activities can be combined with health education. Teachers are generally effective as health educators, being local people capable of speaking convincingly to children, who respect them and listen to what they say.

Informal women leaders can be identified, trained and monitored by staff attached to health units and the Ministry of Social Welfare. These tasks are undertaken with the greatest possible efficacy if integrated with other health education activities rather than being performed in isolation.

Except for the informal women leaders the health promoters all work in the public sector and can gain knowledge, confidence, interpersonal skills and status in the community by undergoing training and participating in health education programmes. Teachers and nurses can learn new ways of reaching students and patients, and public service candidates become more willing and able to undertake community service.

The additional cost of introducing the model programme would be small. The educators are already part of the public service, and educational materials have been prepared, tested and found effective. Funds would be
needed for copying the reading materials and for stationery and other items to be used in schools. Additional money might be required for small incentive payments and the training of trainers.

Success depends on cooperation between various agencies and on their willingness to take a broad view of the process of health education at the community, district and governorate levels. Collaboration is needed between the health, education and social affairs ministries in training, literature distribution, and evaluation.

Even within a single ministry, health education may cross a number of boundaries. Thus messages developed by a diarrhoea control programme in the Ministry of Health need a component on hygienic behaviour as well as advice on oral rehydration therapy. Community development societies, supported by the Ministry of Social Affairs, can respond to local needs by including hygiene education in their programmes.

The model offers the possibility of a flexible response to local needs and of extending boundaries and exploring new tasks and concepts, with the help of educators who are familiar with and respected by their audience. A health education programme should not be perceived by local people as a scheme imposed from afar, but as something they have helped to create, enabling them to lead healthier lives. ■

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