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Group learning by mothers about primary health care

The knowledge of Maldivian mothers about various aspects of primary health care was significantly enhanced when a group-learning approach was adopted.

In the interest of both themselves and their children, it is desirable that mothers should have a good understanding of primary health care. The success of programmes having objectives in this field, for instance the improvement of immunization coverage, depends in considerable measure on mothers' awareness of their value. A mother who knows how to prepare oral rehydration solution has the capacity to save her child from death if it suffers from acute diarrhoea. More importantly, perhaps, her knowledge might enable her to take action in her home to diminish the risk of diarrhoea occurring. Through healthy mothers, healthy communities can be built.

The Republic of Maldives comprises more than 1000 small islands scattered over 100 000 square kilometres of the Indian Ocean. The islands form ring-like clusters or atolls, and these are the basic political and administrative units of the country. Maldivian society is unified by bonds of religion and language. The adult literacy rate in 1990 was above 95%. In 1990 the population, distributed over 200 islands, was 221 000, of which approximately 25% lived in urban environments. The potential for population growth is high because of declining infant mortality (34 per 1000 live births in 1990 compared with 128 per 1000 in 1978) and a high crude birth rate.

The outreach function of health services delivery in Maldives is organized through a network of 21 health centres, four regional hospitals, and a hospital in Male, the capital. Medical manpower is largely concentrated in these five hospitals. The atoll health centres are exclusively managed by community health workers who have undertaken a two-year training programme in which special attention is given to paramedical skills. Family health workers with four months' training function in the individual islands and are thus the closest health service link with the community. They are able to assist and educate mothers confronted by problems associated with pregnancy, childbearing and child care. Home visits provide the main opportunity for getting critical messages across. However, a review of the rural health system in 1983 and supervisory visits made...
in 1985 revealed that mothers were poorly informed about the basic elements of primary care.

**Group learning versus individual learning**

It has been postulated that the group is more effective than individuals by themselves because of cohesiveness, group pressures, standards and goals, leadership patterns and the structural properties of groups. An investigation was therefore made into a group-learning approach, in order to determine whether mothers could acquire more knowledge of the following aspects of primary health care:

- antenatal care;
- family planning;
- diarrhoeal disease;
- immunization;
- use of growth cards in growth monitoring;
- communicable disease control.

A quasi-experimental design was employed, namely the nonequivalent control group design with pre- and post-testing (1). The homogeneity of the population and health services in the atolls, combined with the geographical isolation of the islands, provided an ideal setting for this type of design, particularly with regard to the control of diffusion and contamination of the main programme effect (in this case, the group-teaching intervention).

Selection of the experimental and control groups (atolls) followed careful consideration of the homogeneity of their critical characteristics, such as the type of health services being provided, the numbers of health workers, and the distances of the atolls from the capital. The economic status of the atolls was also taken into account.

The two atolls chosen for the study were Thaa for the experimental group and Laamu for the control group. They are in the south-central region of Maldives and roughly equidistant from the capital. The sampling frame consisted of women with children under three years of age. A random sample of 200 such mothers, approximately 15%, was taken from each group.

The primary dependent variable was the knowledge of each mother about various aspects of primary health care. Specific questions were asked on antenatal care, family planning, the control of diarrhoeal disease, immunization, nutrition, and endemic communicable diseases of importance in Maldives. The questions were framed with a view to revealing the usefulness of the mothers' knowledge for effecting changes in individual and family behaviour. They were incorporated into a questionnaire that was administered before and after the group-learning intervention. Data were collected by visiting the experimental and control atolls and interviewing the same samples of mothers in their own homes on both occasions.

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Intervention took place between June 1988 and July 1989. All the family health workers in both the experimental and control atolls were tested for their knowledge of the six areas of primary care under consideration and were found to be very similar in this respect. In the control atoll, health
Increased knowledge

The data were subjected to covariance analysis. The covariates of maternal age and parity were not significantly associated with changes in mothers’ knowledge. However, in the experimental group even the univariate distribution of the mean composite scores for mothers’ knowledge in various categories showed profound changes between pre-testing and post-testing: almost all the variables indicated at least a doubling of scores, whereas in the control group there was little change. Thus, for example, in the experimental group the mean score for knowledge of pregnancy risk factors increased from 0.26 to 3.75, whereas in the control group the corresponding values were 0.40 and 0.47. The mean change in scores was 3.51 (± 2.39, n = 200) in the experimental group and 0.01 (± 0.81, n = 200) in the control group. The significance of the overall effect attributable to the intervention was further shown by regression analysis of pre/post change scores of the composite variables on a dummy variable denoting experimental vs. control group.

The study demonstrated the effectiveness of a group approach to teaching mothers in the community. The group-learning approach clearly has great potential for accelerating the creation of awareness about primary health care and bringing about the acceptance and adoption of healthy behaviour.

Reference