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BARI MOTHERS: HOME BASED EXPERTS FOR HOME-PREPARED ORAL REHYDRATION SOLUTION

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For the ICDDR, B 1979-80 field trial of oral rehydration solution (ORS) used in the home, it was necessary that ORS be easily and quickly available from people whom the community trusted. These criteria of accessibility were problematic since because of purdah many women rarely leave their bari—a cluster of patrilineally related households around a courtyard. In addition, community health workers visit households regularly only every other week. The idea of training one "expert" in each household—more than 10,000—was rejected because of the size of the task and because of logistic problems

concerned with supplies. An intermediate solution was chosen: training and giving supplies (bottles and either WHO formula packets or a measuring spoon, sugar and salt) to one woman in each bari.

Approximately 1,400 bari mothers were trained and have been working voluntarily since 1979, supported and supplied by community health workers. While there has been some problem with "leakage" of the supplied sugar, the bari mothers have been successful in preparing ORS accurately and in persuading people to use it for diarrhoea.

✓ AGE OF ACQUIRING DIARRHOEAL DISEASES BY RURAL CHILDREN, BANGLADESH

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The International Centre for Diarrhoeal Disease Research Bangladesh conducted an anthropometric study in a village. A clinic was established in the village for the study and for providing health care for minor illnesses to over 400 study children. More than half of the children were followed from birth. Children were brought to the clinic for treatment by the parents. This afforded a chance for examining the age of acquiring diarrhoeal diseases by the children.

Out of 210 children only 5 episodes of diarrhoea were reported during the first month of life. For the first year the number of episodes per child was 3.5, second year 5.0 and third year 3.4 days. The episodes gradually dropped to 2.0 at 10th year.

The duration of diarrhoea was 0.1 day per child during the first month and one day between 6 and 7 month. For the first year it was 16.2 days, second year 22.4 days and third year 15 days. It dropped to 9.5 days at 10th year.

During the first year the duration of diarrhoea in breast fed babies was longer (19.5 days) than the babies breast fed with other supplements (13.8 days). During the second year the breast fed children had shorter (17.4 days) duration than the children breast fed with supplements (23.0).

The peak incidence and duration of diarrhoea occurred between the first and second year of life.

EFFECT OF A MIXTURE OF WHEAT EXTRACT AND MILK ON DIARRHOEA IN MALNOURISHED CHILDREN

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Proper management of severe diarrhoea usually requires a lactose-free or low-lactose formula. Mixing milk with wheat extract and oil provides a low-lactose formula with higher contents of nutrients than diluted infant formula. To evaluate this mixture in malnourished children with severe diarrhoea, 13 patients aged 4.5-17 months were studied. They were randomly assigned as the experimental and control groups, 8 and 5 cases respectively. The experimental formula was a mixture of wheat extract, whole milk (Nespray) and corn oil. The control diet was an infant formula (S26). The lactose contents in the experimental and control formulas were 1.1 and 7.2 grams per 100 ml respectively. The amounts of fat, protein and carbohydrate were almost identical in both formulas. After initial rehydration with intravenous or oral electrolyte solutions, the patients were fed

full strength experimental formula or diluted infant formula. The concentration of the infant formula was increased gradually according to clinical response which was determined by daily weight, stool frequency and consistency.

Seven of 8 patients in the experimental group and 3 of 5 patients in the control group recovered from diarrhoea. The mean SD $\pm$ duration of treatment in the experimental and control groups were 3.0 ± 0.6 and 5.7 ± 2.1 days respectively which were significantly different. One patient who could not tolerate the experimental formula was severely malnourished.

The result from this study suggested that wheat extract may be beneficial in the management of severe diarrhoea in malnourished children.

TREATMENT OF CHRONIC DIARRHOEA WITH GALANTASE

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Galantase, a synthetic lactase, was used in the management of 8 patients who suffered from chronic diarrhoea of 26.8 ± 15.4 days duration. Seven of these eight patients also had poor nutritional status. Prior to treatment with Galantase, three of the six patients who had been receiving non-lactose milk did not gain weight. When non-lactose milk was substituted by full strength humanized or cow's milk plus Galantase, no significant change in stool frequency was observed in

these 8 patients. All except one of these patients gained weight. One patient developed osmotic diarrhoea after discontinuation of Galantase. Galantase may be used to substitute non-lactose milk in the management of patients with chronic diarrhoea associated with lactose intolerance. The duration of administration of Galantase depends on the severity and duration of diarrhoea in each patient.