Diarrhoea Dialogue

ISSUE No. 3

NOVEMBER 1980

AGENTS OF CHANGE

Primary health care means people learning about how to take care of their own health more effectively. Primary health care workers are best chosen from among the community and are then given a short, practical training and basic health education. Such "multi-purpose" workers know enough about most aspects of health care to act as agents of change for the better and provide a link between their community and the more formal health services. Primary health workers refer problems beyond their own competence to the nearest referral centre where someone with more knowledge can take over. If the world is to reach the goal that was set at the WHO/UNICEF Conference at Alma Ata in 1978 of "Health for All by the Year 2000", then millions of multi-purpose primary health workers must be rapidly chosen and trained.

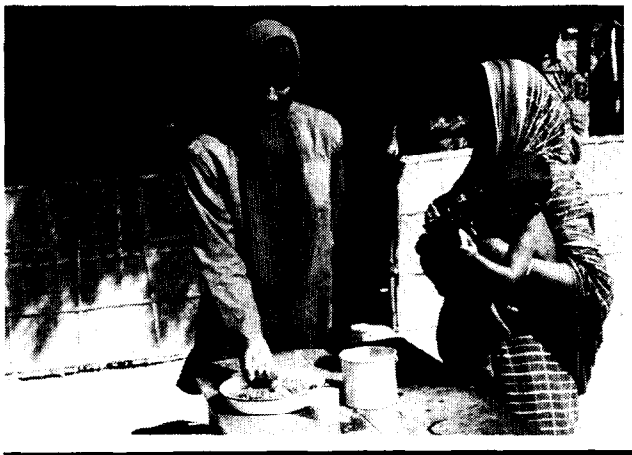
The idea still persists, however, of "uni-purpose" primary health workers trained for a single task. The Bangladesh Rural Advancement Committee (BRAC) programme, described on page two of this issue, trained ORWs (Oral Rehydration Workers) for a single purpose: the promotion of oral rehydration therapy in diarrhoeal disease. There is no doubt that such uni-purpose health workers can make substantial impacts on special problems. The danger lies in thinking that their success solves the problems permanently.

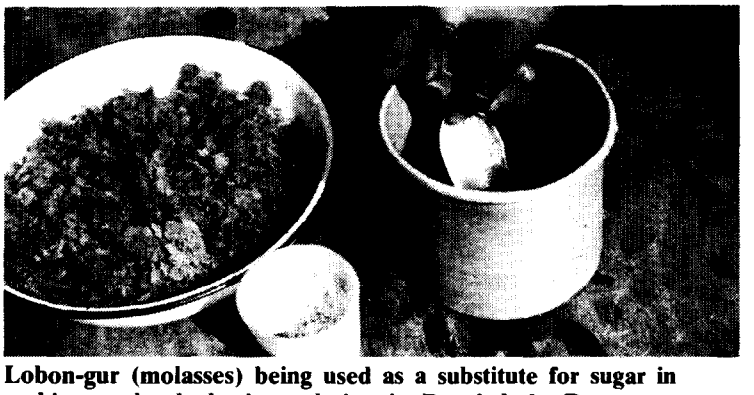
The ORW saves the lives of those who would otherwise have died from dehydration and this is a big step forward. However, such people can do even more if they are given further training and become multi-purpose health workers. They are then more able to understand the context of diarrhoeal disease, to recognize when different treatment is required and how to obtain professional help. For example, the programme described by Dr Nicholas Cohen, on page two, sees its oral rehydration component as part of a general package of health measures.

Health care has to begin somewhere. Oral rehydration is a very important entry point for communities because diarrhoea is so common. As Dr Jon Rohde's article stressed in *Diarrhoea Dialogue 2* "drinking is the message" we have to get across to every family. But we must always keep in mind the need to prevent diarrhoeal disease happening and this is where multi-purpose primary health workers can make an even greater contribution.

This issue of *Diarrhoea Dialogue* takes education as its major theme. Professor Fendall stresses the need for generalized health education and the importance of teaching people how to teach other people in ways that can be readily understood and accepted. The pink centre pages are designed as a pull-out leaflet. The information on the sheets provides a guide for community health workers on the prevention and treatment of diarrhoea. We hope our readers will want to share some of their own ideas and experiences about ways in which all kinds of health educational messages can be most effectively carried to the people who need this knowledge.

K.M.E. and W.A.M.C.





Lobon-gur (molasses) being used as a substitute for sugar in making oral rehydration solution in Bangladesh. Report on page two. *Photographs by Dr Nicholas Cohen*

In this issue ...

- Rex Fendall and Frank Shattock discuss the best ways of teaching the teachers.
- how do we convey health messages to mothers?
- questions and answers
- news from Costa Rica, Bangladesh and Mexico.

AHRTAG

Appropriate Health Resources & Technologies Action Group Ltd

A simple health message

A national workshop on oral rehydration was held in Bangladesh last year. One of the programmes discussed came from the Bangladesh Rural Advancement Committee (BRAC) who are working in a remote rural area of Sylhet. Their programme is based on a simple health message entitled 'Ten points to remember'. These points include a description of how diarrhoea begins, the recipe for an oral rehydration mixture 'lobon-gur' (with molasses as a local alternative to sugar), the dangers of giving the wrong quantities and when a case should be referred to a doctor. The goal of the programme is to teach oral rehydration therapy to one woman in every household in the project area.

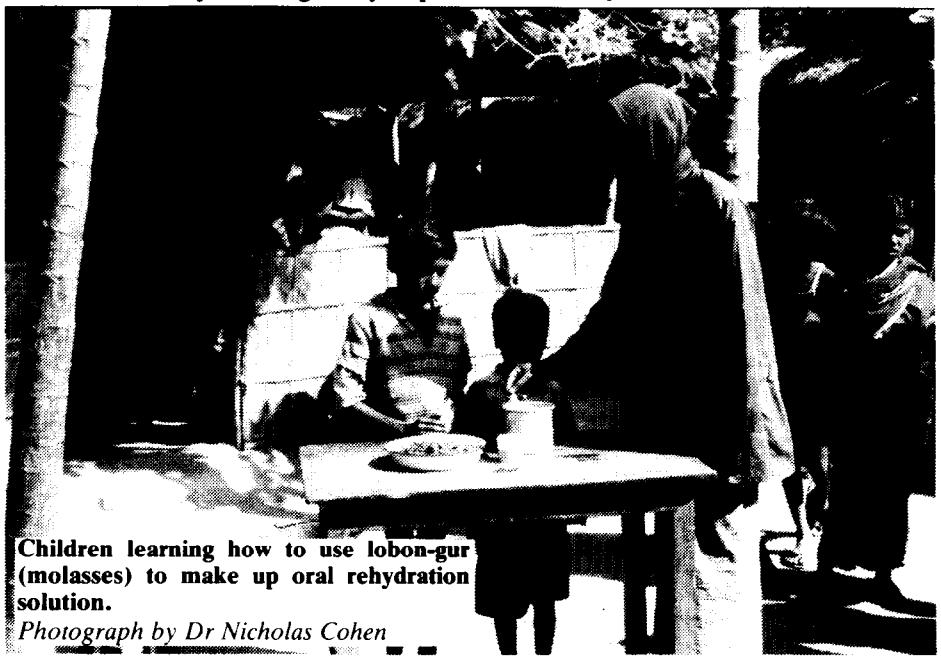
Oral Replacement Workers (ORW), women between 20 to 50 years old who can read and write Bengali, visit homes to ensure that the lobon-gur mixture is being made properly. In Azmiriganj, Sylhet, BRAC has 30 ORWs working about 15 days a month. The programme staff is composed of a project manager, two monitors and two teams. Each team assigned to a specific village has a coordinator, ten ORWs and a service staff.

Monitors visiting homes two weeks after the visit of the ORW found that all the women were mixing the ORT solution correctly, although only 34 per cent could recall all of the 'Ten points to remember'. The ORWs were paid according to the number of mothers who were mixing the solution correctly and could remember some or all of the ten points.

BRAC's oral rehydration programme 1980. Glimpse vol 2 (1): 1–2.

Local alternatives

Dr Nicholas Cohen, currently working with the National Institute of Social and Preventive Medicine in Dacca, has sent us photographs and a report of an oral rehydration programme in Bangladesh sponsored by the Save the Children Fund (UK) and assisted by the International Centre for Diarrhoeal Disease Research (ICDDR,B). The programme, designed to provide oral rehydration therapy where pre-packed oral rehydration salts are unavailable or inappropriate, is aimed at two main groups. Firstly children, and secondly villagers with a special interest in being trained as health workers. Two special features of this programme are the monthly meetings for all those involved to discuss results and problems, and regular checking of the concentration of oral rehydration solution made up by villagers. Ideally, the programme is seen as part of a package of health measures which should be made available cheaply and regularly in every community.



Children learning how to use lobon-gur (molasses) to make up oral rehydration solution.
Photograph by Dr Nicholas Cohen

Training programme

A training programme for national programme managers was organized by WHO in Bangkok from 27 October to 7 November. Forty participants attended from all over the world. The aim of the course was to provide information so that the participants could return home and set up and manage national diarrhoeal disease control programmes. This was done by presenting participants with a fictitious country within which, given appropriate data, they had to work out the logistics of setting up an oral rehydration supply system and identify ways of controlling diarrhoeal diseases. Discussions with WHO staff running the course and with other participants helped to link the theory to the particular problems that each manager would face at home. It is hoped that those who attended the course will teach others in future training programmes within the WHO regions. We would be interested to hear from anyone who took part in the training programme.

Spanish translation

A Spanish edition of *Diarrhoea Dialogue* is now available from the Pan American Health Organization 525, Twenty-third Street, N.W., Washington D.C., 20037, U.S.A.

OR tablet

PATH, the Programme for Appropriate Technology in Health and its affiliate, PIACT de Mexico, have recently developed an effervescent tablet containing enough oral rehydration salts for 200cc (a glass or cup of water). The new tablet is now undergoing final shelf life and packaging tests before it becomes available for evaluation within oral rehydration therapy programmes. A pink colouring has been added to the tablet to take advantage of the association (found in many countries) between pink colour and "stomach medicine". Further information on the tablet can be obtained from PATH, 4000 NE 41 Street, Seattle, Washington 98105, USA.

Costa Rica

The Ministry of Health and the state welfare system in Costa Rica are both using oral rehydration nationally. The treatment was originally developed in hospitals and then auxiliary health personnel were shown how to use it in rural areas. The Instituto de Investigaciones en Salud (INISA) has developed a pack of oral rehydration salts (Sueroral) which is being widely distributed together with instructional materials for health workers and mothers. The pack contains the correct amount of salts to be mixed with 8 ozs of fluid, which is the size of the average baby feeding bottle.

Sueroral sachet.

No cost is involved in delivering oral rehydration therapy at community level because Costa Rica already has an infrastructure for primary health care. Oral rehydration forms part of a broad national programme to prevent diarrhoeal diseases in Costa Rica. Breastfeeding is being promoted and further research carried out into the diagnosis and treatment of acute diarrhoea. Education and sanitation programmes are under way and the installation of water pumps is now reaching sparsely populated rural areas with the aim of supplying 95 per cent of these areas by 1985.

Leonardo Mata

Some of th… water supplie… common scene … used for washing, d… the village sewer.

WHO/UNICEF photo by B. Wolff

Paediatric congress

The challenge to paediatricians of diarrhoea and malnutrition was discussed at a symposium held at the International Paediatric Congress in Barcelona last September. Speakers from all over the world emphasized the need for better standards of hygiene and nutrition to prevent the millions of childhood deaths caused annually by diarrhoea. A discussion on dehydration therapy focused on the recent successful introduction of oral rehydration therapy in many developing countries.

Dr M. Merson from WHO stressed that all but the most severe cases of diarrhoea can be successfully treated with the WHO/UNICEF oral rehydration solution and that this simple approach is lowering morbidity and death rates. The most important thing now is to convince paediatricians and other health workers that this simple approach to diarrhoea management works.

In the next issue ...

- we will focus on water and sanitation
- Richard Feachem will contribute a feature on water and sanitation in diarrhoeal disease control
- our practical advice page will look at hand pumps
- we will have more questions and answers, and news

Diarrhoea Dialogue 4 will be available at the end of February 1981.

Health education for diarrhoea

Poor communication is one of the most frequent causes for the failure of sick people to follow instructions given by health professionals. Rex Fendall and Frank Shattock discuss how health education programmes must be both appropriate and realistic.

Unless communities fully understand programmes they will fail to cooperate on a continuing basis. Even for relatively simple projects such as one-shot disease eradication programmes, intensive education is vital to prepare the people. The oral drug administration programmes against leprosy and tuberculosis clearly showed this need when, after two years, they were found to be reaching only about 40 per cent of their original target. The lesson had to be painfully relearned when oral contraceptives were introduced as the new revolution in family planning for developing countries. If people won't persist with life-saving drugs for feared diseases, then drugs, appliances and concepts for social purposes are even less likely to succeed in the absence of effective communication.

The task facing us when we consider diarrhoea is stupendous. Some five million children are killed by diarrhoea each year and most of these are under two years of age. Diarrhoea is seen as a "normal" part of early childhood. So the educational programme has to be directed, not at the affected, but at parents, or even grandparents and clan elders. And diarrhoea is not a single disease, but a symptom-complex covering a considerable range of specific diseases, which are most common where knowledge and resources are most lacking. Illiteracy is inevitably high so that communication becomes even more difficult.

Village health workers on a primary health care course at Torodi, Niger.
WHO photo by R. da Silva

Creativity

Various studies exist which show the pitfalls of relying on visual aids for communicating with illiterate audiences[1]. In Zambia and Ethiopia, Andreas Fuglesang found that certain perceptions are necessary for an understanding of visual aids and that many of these are lacking in illiterates[2]. He believes that communication is fundamentally a *creative* function. Doctors, nurses and auxiliaries, who are trained as scientists, too often apply the same concepts in training village health workers. Traditional beliefs give rise to many bad habits but people can learn new concepts that are clearly presented. Health education programmes can however be offset by vested interest propaganda campaigns as well as by community reluctance to accept any kind of change.

Realistic aims

Good communication is vital, but our aims must also be realistic and easy to carry out within the community. It is, for example, pointless to insist that communities boil their water if fuel is scarce, expensive, or difficult to obtain. Far better to locate those areas with a high rate of diarrhoeal disease, inspect the water and protect it at source from pollution – however simply. It is equally pointless to try to achieve too high a standard of water purity. However well designed, untreated but protected springs may still have faecal coliform bacteria present. To attempt to reach WHO recommended standards throughout a developing territory's rural area would require chlorination. The priority is surely to ensure easily accessible and reasonably clean water supplies.

Educational programmes

Not only must programmes to improve environmental resources be realistic; they must be accompanied by educational programmes. Without this, for example, a pit-latrine can become a greater hazard for germ spread than defecating in the bush! Political and research programmes must be carried out as well as direct educational programmes; and money is required urgently to meet this need.

Local beliefs play a tremendous role in resistance to changing habits.

ıary health care

Good communication is vital in any health care programme. Mothers on a nutrition course in Guatemala.
WHO photo by Eraka Xuereb

Western explanations of the aetiology and epidemiology of disease are not readily accepted by many traditional communities. It is essential to find out local beliefs on the causes of diarrhoea, which may be linked to taboos relating to marriage, intercourse, weaning, teething, dietary habits, etc.

In parts of Africa, the indigenous treatment of dehydration is to put a black paste on the fontanelle. Parents recognize that with rehydration the fontanelle rises from its sunken condition. They willingly accept scalp vein transfusions as these are merely a different form of medicine applied to the same part of the body as their own traditional treatment but they can see the fontanelle rising faster! Rehydration by mouth is more difficult for them to understand and requires carefully planned educational programmes.

Primary health care teamwork

Acceptance of modern treatment for diarrhoea does not imply an understanding of the role of dehydration and rehydration in causing and preventing deaths. Health education must attempt to link traditional beliefs and practitioners to desired objectives. Despite the fact that all health professionals must undertake health counselling, and be seen to be doing it, the main burden inevitably falls on primary health care workers in the rural areas and in the shanty towns of developing countries. Whilst the role of the primary health care workers is to deliver the message, the referral health care team must ensure that the message is correct and that the primary health care workers are taught the best way of delivering such messages.

How to communicate

The key issue is *how* to teach the primary health care team to communicate with a largely illiterate audience. This is not an easy task. It is far easier to teach a primary health care worker a manual skill than it is to teach the art of effective communicating.

Not until professionals get priorities right, and convince the politicians and decision makers – ie "health educate" them – will we be able to provide effective health educational programmes for the control of diarrhoea. In communities where history is still passed down by word of mouth, verbal health education is obviously of far more value than written or visual material. Primary health care workers – who have a foot in both traditional and modern culture – are the most important health communicators. However, they are often the most ill-prepared for the job. The result can be the beginning of a chain of misinformation.

Future possibilities

To take just one example of applied technology, it is possible to imagine a system of communicating using audio-tapes. These would be based on community research into local customs and beliefs, and the most common questions on diarrhoea. Primary health workers with simple tape-recorders would then be able to convey **accurate** messages and at the same time be themselves further educated. Gradually each health worker would build up a comprehensive library from which individual tapes could be regularly updated. Expensive? Cheaper than misinformation!

N.R.E. Fendall and F.M. Shattock, Liverpool School of Tropical Medicine, Department of International Community Health.

[1]*Holmes A C 1964 Health Education in Developing Countries. Thomas Nelson & Sons, London.*
Shaw B 1969 Visual Symbols Survey: Report on the recognition of drawings in Kenya. African Medical and Research Foundation, Nairobi (Mimeographed).
[2]*Fuglesang A 1973 Applied Communication in Developing Countries: Ideas and Observations. The Dag Hämmarskjold Foundation, Uppsala, Sweden.*

Practical advice series

Getting the message across

A health education programme that is to be effective, whether nationally or locally, must use many ways of getting its message across. Posters, puppets, cartoons, simple leaflets and even magic are just some of the methods that can be used to convey basic health messages. Where oral rehydration is concerned, providing sachets of oral rehydration salts or measuring spoons without appropriate instructions may do more harm than good. This page shows three simple ways of telling people about rehydration.

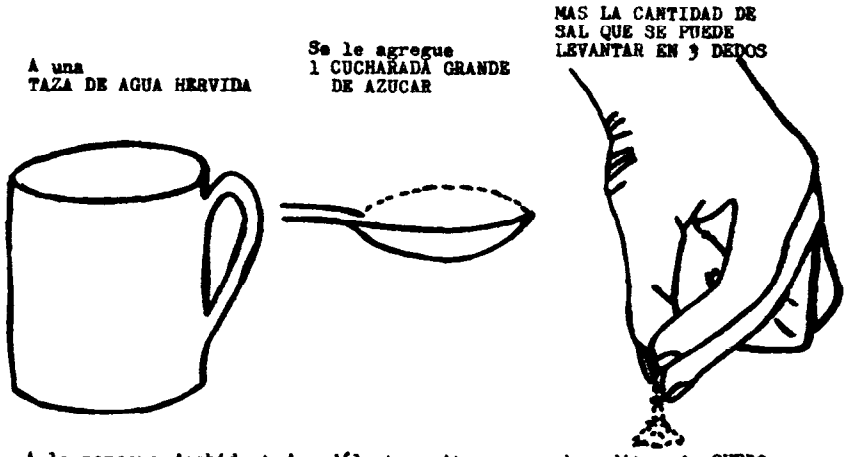
Cartoons

Professor C. Y. Chen of the Faculty of Medicine at the University of Malaya has adapted Jon E. Rohde's story of Abdul and Seri into a local cartoon book. The story shows how older brothers and sisters and grandparents can all help when younger members of the family have to be treated for diarrhoea. The story has also been converted into an audio visual set for use in West Malaysia.

Abdul and Seri.

Local leaflets

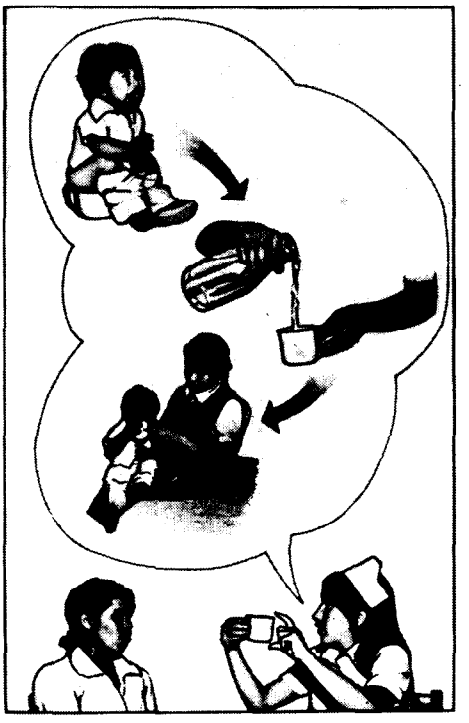
Our illustration showing how to mix oral rehydration solution is taken from a simple course on common diseases produced by the Programa Promotores de Salud in Huehuetenango, Guatemala. The leaflet also contains basic advice on respiratory and stomach infections and a chart for keeping a record of the patient's health.



A la persona deshidratada, déle traguitos en cucharaditas de SUERO PARA TOMAR cada 5 minutos hasta que empiece a orinar normalmente. Una persona grande necesita 3 a 6 litros al día. Un niño chiquito necesita, por lo menos, 6 tazas al día.

PIATA

PIATA-Mexico has developed a leaflet on oral rehydration salts for use in the National Health Programme. The leaflet has been tested in rural areas, especially among illiterate women. It is used by auxiliary health personnel to explain to mothers how to prepare the solution, when to give it and how often to give it. The importance of continuing to breastfeed the child during the treatment is also stressed.



An illustration from the PIATA leaflet which conveys the message about oral rehydration in a simple way.

A copy of the pamphlet is given to the mother with a packet of oral rehydration salts and serves as a reminder of the verbal instructions given by the health worker. The pamphlet does not contain words. A small version of the leaflet is now available, the same size as the packet of oral rehydration salts. If you would like further information on the design, testing or adaptation of these materials, please contact PIATA (Programa para la introducción y adaptación de tecnología anticonceptiva) Shakespeare 27, Mexico 5, D.F., Mexico.

Potassium losses and replacement in diarrhoea

Anxiety about potassium (K+) levels in oral rehydration seems widespread, especially when home-made mixtures are used. Instead of a selection of questions and answers we have devoted this page to the potassium question.

Diarrhoea results in not only loss of water but also sodium chloride, potassium chloride and sodium bicarbonate. Potassium (K+) loss is a well known complication of diarrhoea and may result in low levels of K+ in the blood plasma (hypokalaemia). The signs of severe K+ loss are weak and relaxed muscles (hypotonia), abdominal distension and slowing of the heart rate.

The ability of the kidney to concentrate urine is also impaired in K+ depletion. Since 98 per cent of K+ is inside the cells of the body plasma, K+ levels are a poor indicator of K+ depletion. The electrocardiogram (ECG or EKG) is a better monitor of K+ status, as the shape of the ECG tracing changes according to K+ concentrations within the heart muscle cells. However, the harmful effects of K+ depletion listed above are associated with hypokalaemia rather than depletion of total body K+[1].

K+ depletion is important in children with chronic diarrhoea, those who are malnourished, and among breastfed babies more than bottle-fed babies because cows milk contains more K+ than human.[2, 3]

The kidneys are the usual mechanism for controlling K+ and excrete the ion if levels in the blood become too high (hyperkalaemia). There is a danger of K+ accumulation in severe cases of dehydration where the kidneys have stopped secreting urine.

Oral rehydration

When diarrhoea with dehydration is treated by oral rehydration therapy (ORT), K+ is replaced because the solution contains 1.5g (20mmol) of potassium chloride (KCL) in one litre. Extensive use of this mixture has not been associated with hyperkalaemia,[4, 5] except for one report of a study of seven infants who were treated for rather long periods (mean 41 hours) with ORT.[6] This is presumably because the K+ approximately replaces the loss in most cases and also because the kidneys excrete any excessive amounts. In most cases of acute diarrhoea the dehydration and hypokalaemia will have been corrected within 24 to 36 hours with ORT, although some workers prefer to give additional water to small children.[7]

A severely dehydrated child.
Photograph by Dr William Cutting

Sugar-salt solution

In situations where OR packets or solution are not available and individuals are not severely dehydrated from diarrhoea, a simpler solution of salt and sugar can be useful for first-aid home management. In one recent study of children in Honduras such a sugar-salt solution (SSS) was found to correct both dehydration and acidosis effectively but the levels of serum K+ remained significantly low.[8] These workers examined local fruits to find a suitable source to replace K+. Raw plantain (25.9mmol K+ in 263g) or a cupful of mashed banana (21.3mmol K+ in 225g) had the highest K+ content. Papaya mashed (13.7mmol K+ in 230g) and orange juice (12.7mmol K+ in 248ml) were next, followed by tomato juice, coconut water and lemon juice.

They found that children took about 30ml of pureed banana (about half a banana) without any increase in diarrhoea. This was inadequate to overcome the K+ deficiency but larger amounts of banana were not tried. These authors emphasize the need for more detailed studies on the K+ content of foods and their acceptability to children with diarrhoea. There are other possible sources of K+. For example, the crude sugar 'gur', which is used to make up simple OR solution in Bangladesh (see page two), contains considerable amounts.

The Honduran study was encouraging because it showed that simple sugar-salt solution satisfactorily corrected dehydration and that such a widely available fruit as the banana was a rich source of K+.

[1] *Beeley L 1980 When do patients on diuretics need potassium replacement? Adverse Drug Reaction Bulletin No.84 pp 304–7*

[2] *Kingston M E 1973 Biochemical disturbances in breastfed infants with gastroenteritis. Journal of Tropical Pediatrics 82, 6. 1073–1081*

[3] *Tripp J H, Harries J T 1980 Oral rehydration of infants with gastroenteritis. Advances in Biosciences vol 27 Gastrointestinal emergencies 2 pp 23–33. Edited by F. R. Barany et al*

[4] *Clements M L et al 1980 Oral therapy with glucose electrolyte solution. The Lancet vol 2: 34*

[5] *Santosham M et al 1980 Hyperkalaemia and glucose electrolyte solutions. The Lancet vol 2: 583–584*

[6] *Kahn A, Blum D 1980 Hyperkalaemia and UNICEF type rehydration solutions. The Lancet vol 1: 1082*

[7] *Pizarro D et al 1979 Oral rehydration of neonates with dehydrating diarrhoeas. The Lancet vol 2: 1209–1210*

[8] *Clements M L et al 1980 Personal communication*

letters . . . letters . . . letters . . . letters . . .

Limited aims

Any treatment that we give in our rehydration centres in Yako must be simple enough for mothers to carry out by themselves — except, of course, for methods such as intravenous feeding which require hospitalization. Obviously, the use of sugar and salt accelerates rehydration but many homes in Upper Volta cannot afford sugar and salt and, in addition, women are not used to giving liquids to children with diarrhoea.

However, once converted to the use of sugar and salt in water, mothers start to believe that the 'magic powder' is more important than the water itself. The risk then is that if sugar and salt are unavailable the mothers will not give water alone. The importance of water should be stressed — and the use of salt and sugar should be played down until they are more widely available.

Our main aim was to see that dehydrated children received water — with or without salt and sugar. This may seem a limited objective, but my experience over ten years working in rural areas has shown me that targets should not be set too high.

F. Gourrier, Yako, Upper Volta and 2100 St. Appolinaire, Dijon, France.

Local substitutes

Could a future issue of *Diarrhoea Dialogue* include ways in which salt and/or sugars are produced at village level and how effective they are?

I work in a fairly isolated spot in Zambia, where many of the villagers have no access to salt and most have no access to sugar. At the moment, we cannot make and distribute an oral rehydration solution for various reasons – although this may be possible in the future. I have listed below some of the local substitutes that we are using:–

Sugar substitutes:

August/September – Muhwahwa/ Muhulohulo, a mildly sweet wild fruit but with a lot of pips.

October/November – Mbole, a very sweet wild fruit that can be pounded and is easy to dry and store.

December/April – Guavas in some areas only.

December/May – Sugarcane, can be pounded for its juice.

May/July – Honey, only available in certain forest areas and mainly used for beer.

Salt substitutes:

July/September – Some flood plains have a salty soil which is gathered. Water is then filtered through it and this salty water can be boiled until only a greyish salt remains. This can be stored for the entire year.

I have heard, although I have never actually seen, that the lining of termite hills is very salty and that the earth can be handled as described above to obtain salt. Both these possibilities of obtaining salt are only available in certain parts of our catchment area. I would be interested to hear about other field workers' experiences in trying to obtain salt and sugar locally.

Sue Cavanna, Sichili Hospital, P.O. Box 60724, Livingstone, Zambia.

Vomiting

I thought that the first issue of *Diarrhoea Dialogue* was good and convincing. But the word "vomiting" did not occur in the whole newsletter. I would describe this as being unrealistic.

A.C. Jellema, Consolata Hospital Kyeni, Runyenjeyes, Kenya.

Editorial note:

Various readers have made the same point. One reason for not discussing this important aspect of the management of diarrhoea in an early issue was because we were concentrating on the positive aspects of oral rehydration therapy rather than the problems.

We recognize that we may have to overcome a social or psychological barrier with mothers who see no sense in giving fluids by mouth which are then promptly rejected by the sick child. Obviously, vomiting makes it more difficult to give fluids orally. However, there is ample clinical evidence that in all but the most serious cases of gastroenteritis it is possible to successfully give fluids by mouth as long as they are given in sufficiently small quantities and at frequent intervals (every five to ten minutes). If the child is too weak to drink from a cup, it should be given small, frequent sips from a spoon.

Michael Gracey

Mother's lap

Oral rehydration can be extremely effective, but if it is given in hospital it needs a large staff as it must be given slowly and intelligently. There are rarely enough nurses to use ORT for many cases. The mother and the mother's lap are the best accompaniments to oral rehydration. Mothers can be easily supervised by doctors and nurses, shown how to hold and support the child and how to administer the fluid correctly. Soothing and encouragement is just as important as the fluid.

The admission of mothers to hospitals also has many other advantages. It enables the staff to get to know the mothers and to advise how the child should be cared for after leaving hospital and how the mothers should cope with future cases of diarrhoea.

Cicely D. Williams, Wyndham House, Plantation Road, Oxford.

Editors: Dr William Cutting (U.K.) and Dr Katherine Elliott (U.K.)

Editorial advisers: Dr I. Dogramaci (Turkey), Dr Richard Feachem (U.K.), Dr Michael Gracey (Australia), Dr N. Hirschhorn (U.S.A), Dr D. Mahalanabis (India), Dr Leonardo Mata (Costa Rica), Dr Mujibur Rahaman (Bangladesh), Dr Jon Rohde (Rockefeller Foundation), Dr E. O. Sullesta (Philippines), Dr Paul Vesin (France), Dr M. K. Were (Kenya).

Executive editor: Denise Ayres

With support from **WHO** and **UNDP**

Diarrhoea Dialogue

Diarrhoea Dialogue is produced by AHRTAG at 85 Marylebone High Street, London W1M 3DE. Tel. 01-486 4175.

 Printed in the United Kingdom by Bourne Offset (Iver) Ltd.