Diarrhoea Dialogue

ISSUE No.1

MAY 1980

DIARRHOEA NEED NOT KILL

The diarrhoeal disease scenario

Diarrhoeal disease has long been recognized as the greatest killer of infants and young children in the developing world. Well over 500 million episodes of diarrhoea in children under five are estimated to occur annually in Asia, Africa and Latin America. At least five million children die.

Diarrhoeal disease is a major contributory factor to malnutrition. Recurrent diarrhoea coupled with inadequate feeding results in impaired body defence mechanisms. Malnourished children have up to a 50% higher incidence of diarrhoeal disease and suffer more severe attacks than normally nourished children.

Although diarrhoeal diseases are most often lethal among the very young, they are a major cause of ill health and of death among children and adults of all ages, adding to the huge burden of the many communicable diseases prevalent in the developing world.

Long term and short term remedies

Diarrhoeal diseases are usually transmitted by faecal contamination of food and water, so a vital long term objective is improvement of water supplies and sanitation. The global improvement of nutrition is as essential to break the link between diarrhoea and malnutrition. More urgently, measures can and must be adopted to enable prompt treatment and control of diarrhoea. All diarrhoeas lead to dehydration and if untreated, progressive dehydration is fatal. It has been known for decades that replacement of salt and fluid losses in sufficient quantity can prevent diarrhoeal deaths, but, until about 1970, conventional treatment was rehydration by intravenous infusion, which is expensive and requires skills and facilities found only in well staffed and equipped clinics and hospitals.

Fluids by mouth do work

Treatment by oral rehydration therapy (ORT) – a drink comprising glucose, sodium and potassium chlorides, sodium bicarbonate and water – was first used on a large scale among refugees from the 1971 India-Pakistan war. In the camps, the mortality rate dropped from 30% to 1%. Since then, ORT has been widely used with great success. The Infectious Diseases Hospital in Calcutta and the hospital of the International Centre for Diarrhoeal Diseases Research in Bangladesh now use only 20% of the amount of intravenous fluid previously used for diarrhoeal diseases treatment. Controlled studies in Indonesia, Pakistan, Costa Rica and the Philippines have all shown major reductions in diarrhoea-related deaths since the introduction of ORT. The main advantage of ORT is that as an inexpensive and simple procedure it can be prepared and given by primary health care workers or mothers, therefore avoiding the necessity of treatment in large hospitals.

Constraints to implementation

Although ORT has been shown to be effective, some constraints have to be resolved before the treatment can be universally available. These include manufacturing and packaging the oral rehydration powder as cheaply as possible whilst maintaining quality and shelf life; the arrangement of efficient delivery systems to ensure continuity of supply, especially to remote rural areas; and the need to find the safest and most effective methods of treatment for mothers and health workers to use, when the complete oral rehydration formula is not available, or when a substitute is needed for an ingredient such as glucose which is expensive and hard to obtain in some countries. These problems of supply and delivery are inevitable but by no means insoluble and should not deter any country from implementing a national ORT programme.

Global interest in oral rehydration

Interest in the use of oral rehydration therapy has been growing rapidly on the part of numerous national governments (with the backing of the World Health Organization, which has a specific diarrhoeal diseases control programme, and the United Nations Childrens Fund); of many non-government organizations and voluntary agencies engaged in primary health care work; and of clinicians involved in research and teaching.

THE ROLE OF DIARRHOEA DIALOGUE

This newsletter is about the latest developments, new ideas and solutions to problems, the organization and results of controlled field studies and the establishment of new national and local programmes in diarrhoeal diseases control in developing countries. We hope to provide not just facts and news but also a forum for opinion and comment. The main article in this first issue of *Diarrhoea Dialogue* considers some of the controversial questions that are being asked about oral rehydration therapy. Please help us to answer them.

Diarrhoeal disease is not only treatable but largely **preventable**. This newsletter will also present some of the new ideas on water supplies and sanitation technologies which the forthcoming UN Water Decade is certain to provoke. The December 1980 issue will concentrate on the relationship between water and diarrhoea. Later issues will discuss the place of feeding in the management of diarrhoea, the role of drugs and traditional remedies in treatment and future possibilities for immunisation.

Debate not dispute

Diarrhoea Dialogue is intended to be a place for debate rather than dispute. While detailed scientific arguments can be pursued in academic journals, this newsletter will focus on promoting the exchange of practical information and experience related to the effective prevention and treatment of diarrhoea. *Diarrhoea Dialogue* is meant for everyone who cares about unnecessary suffering and deaths. Your ideas, experience and constructive criticism are needed to make it into a genuine dialogue.

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

With this issue ...

- we introduce *Diarrhoea Dialogue*
- we outline and explore some of the main issues
- we look to you, the readers, for ideas, comment, questions . . . and more readers!

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