ICDDR,B

Glimpse

international centre for diarrhoeal disease research, bangladesh

NEWSLETTER

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The third meeting of the Consultative Group for ICDDR,B was held in Geneva on 1st June, 1982.

CONSULTATIVE GROUP MEETS

The 3rd Consultative Group meeting for the ICDDR,B was held during the UNDP Governing Council in Geneva. It was sponsored by UNDP, New York and chaired by Mr. William T. Mashler, Senior Director, Division for Global and Inter-Regional Projects, UNDP. Mr. A.M.A. Muhith, Minister for Finance and Planning, Government of the People's Republic of Bangladesh, represented the host country, and Dr. Halfdan Mahler, Director-General, World Health Organization addressed the meeting where the progress report, future programmes and financial requirements of ICDDR,B were presented.

Australia, Bangladesh, Canada, Egypt, France, Japan, Sweden, Switzerland, Turkey, U.K., U.S.A., Aga Khan Foundation, IDRC, UNFPA and WHO participated in the meeting and showed keen interest in the activities of the Centre. The Government of Japan and the Aga Khan Foundation formally announced their contribution and the Government of Turkey announced their participation with the Centre.

SHARING INFORMATION ON DIARRHOEA: A NEW PROJECT

It is reported that over 500 million episodes of diarrhoea occur in under-five children annually in Asia, Africa and Latin America. In the third world alone, deaths due to diarrhoea every year may reach a staggering figure of 25 million. Oral rehydration therapy has been recognized as a significant development in the treatment and control of diarrhoeal disease. Effective dissemination of research results and sharing of practical experiences through newsletters, bulletins, journals, information sheets, and bibliographies are effective mechanisms through which it is possible to reduce its incidence and improve the outcome from diarrhoeal attacks. It is recognized that quality of research, as well as the implementation of the results of the research, could be greatly improved by effective exchange and dissemination of information.

The need for a programme for more effective dissemination of information is particularly severe or serious in Asia because of the weakness of the library collections, the difficulty experienced by Asian authors in getting their papers accepted in recognized journals, and the forbidding foreign exchange costs for purchasing journals, photocopies, etc. In February 1981 the First Asian Conference on Diarrhoeal Diseases held in Dacca, organized under the

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SHARING INFORMATION

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auspices of the International Centre for Diarrhoeal Disease Research, Bangladesh and the National Institute of Cholera and Enteric Diseases, Calcutta, addressed this issue and the participants recommended the establishment of an information retrieval network on diarrhoeal diseases and information clearing-houses in each country of the region.

DISC

The International Diarrhoeal Disease Information Service and Documentation Centre (DISC) has been established at ICDDR,B in May 1982 with the financial assistance from the International Development Research Centre (IDRC), Canada. The DISC aims to collect, organize and disseminate information on diarrhoeal diseases, encourage a free flow of information, help avoid duplication of research efforts and to speed up the application of improved practices. This project, initially funded for three years, will attempt to bridge the information gap that exists in the field of diarrhoeal disease. With better organization of the existing and new knowledge of diarrhoeal disease, the DISC will assist researchers and practitioners in the ultimate goal of preventing and controlling the disease.

The Programmes

During the project period, the DISC will undertake the following programme of activities:

Question-and-answer service: DISC will operate a question-and-answer service. Clients (particularly from Asia) would put questions which will be responded with the help of experts from ICDDR,B.

Expanded Version of Newsletter (Glimpse): The newsletter now covers the research activities in progress at ICDDR,B and information on training, courses, seminars and workshops offered by ICDDR,B. It will be expanded to highlight the activities, publications and services of DISC. New research projects, announcements of relevant meetings, conferences, etc. of ICDDR,B and other organizations and their summaries will be reported.

Journal of Diarrhoeal Disease Research (JDDR): The quarterly journal will be published in March 1983 which will contain original research articles, short communications and letters. This will provide an alternative medium of publication to Asian scientists who, for language, economic or other reasons, often face difficulties in getting their papers accepted in international journals. The JDDR will also contain annotated bibliography of Asian literature on diarrhoeal disease. An international Editorial Advisory Board has been formed with a number of scientists from ICDDR,B and scientists from 26 countries.

Bibliography of Asian Materials on Diarrhoeal Diseases: This is planned to be published within the JDDR and will cover documents produced in Asia or about Asia. Each reference will normally be accompanied by an annotation that will identify the conclusions of the original document.

Document-delivery Service: As far as possible, all documents that are identified in the on-going bibliography of Asian literature will be collected by the documentation centre of DISC and will be reproduced as microfiches for distribution to the DISC clients. In addition to the installation of a jacket microfiche-production laboratory, a number of microfiche readers will be distributed to key Asian institutional clients of DISC.

Specialized Bibliographies on Specific Topics of High Current Importance with the Field of Diarrhoeal Disease: DISC, with the advice of the scientific community, will identify particular topics and prepare about 10 short selective bibliographies of relevant papers during the three years period. Typically they might consist of 50-400 citations accompanied by annotations to describe contents/conclusions.

Who's Who of Asian Scientists and Practitioners in Diarrhoeal Disease: DISC, during its operations, will identify scientists associated with diarrhoeal disease research for publication of the Who's Who which will include information on address/telephone, telex, etc., institutional affiliation, and identification of the individual's field of work or specific interest in diarrhoeal disease.

Subject Heading List with Scope Notes: For the purposes of indexing DISC products, a subject-authority list will be developed and maintained. The U.S. National Library of Medicine (NLM) subject headings will be used as a basis, with addition of new headings specific to the field of diarrhoeal disease. Where necessary, scope notes will be added. DISC will correspond with NLM offering its suggestions for possible adoption in MeSH.

Manual on DISC Procedures: The DISC procedures will be documented as they are initiated and modified in the light of experiences. The documentation of the procedures will be finalized and be available to other interested centres in the last year of the project.

Workshop: A workshop with key Asian institutions to review the experience and activities beyond the first three years is planned to be held in the last year of the project and is expected to be scheduled in conjunction with any major diarrhoeal disease conference to take advantage of the presence of experts in the field.

Advisory Board

An advisory board, formed with a number of scientists from ICDDR,B plus a few from scientific institutions within and outside Asia, would work essentially by correspondence and serve, in an honorary capacity, to advise the DISC.

The Scope

The subjects (diseases):
The following is a list of the diseases to be given priority consideration in the DISC programme (arranged in alphabetical order). Other causative agents of diarrhoea may be covered if they become recognized as important.

AEROMONAS
A. shigelloides (A. shigelloides, C_{27} organism)

CLOSTRIDIA
C. botulinum, C. difficile, C. perfringens

CAMPYLOBACTER (Vibrio fetus)
C. fetus ssp. jejuni (Related vibrios)

ESCHERICHIA COLI
Enterotoxigenic (LT, ST, LT & ST), Enteropathogenic

HELMINTHS
Capillaria Phillipinensis, Hookworm (ancylostoma duodenale, necator Americanus), Strongyloides stercoralis, Trichuris trichuria

HORMONES
Gastrin, Prostaglandins (PG), VIP

NUTRITION DISORDERS, MALABSORPTION AND LACTASE DEFICIENCY

PROTOZOA
Entamoeba histolytica, Falciparum malaria, Giardia lamblia (intestinalis), Trichomonas hominis

PSEUDOMONAS
P. aeruginosa

SALMONELLA
S. paratyphi, S. typhi, other salmonellae

SHIGELLA
S. boydii, S. dysenteriae type 1 (Shiga) and type 2-10, S. flexneri, S. sonnei

STAPHYLOCOCCAL ENTEROTOXIN

VIBRIOS
NAG vibrios, (NCV, cholera-like vibrios, V. cholerae non-01), V. cholerae (01), V. fluvialis, (EF6 organism, Group F organism), V. parahaemolyticus

VIRUSES
Adenovirus, Echovirus, Enterovirus, Norwalk Agent, Parvovirus-like Agent, Rotavirus

Yersinia
Y. enterocolitica

The Aspects:
DISC will cover information on these diseases which may emerge from, or be useful to: Biomedical research; development of control and treatment procedures; establishment of programme for introducing control and treatment procedures.

The Geographical Area:
DISC will initially concentrate on the Asian region.
For further queries, information and suggestion, write to:
Manager, DISC
International Centre for Diarrhoeal Disease Research, Bangladesh
GPO Box 128, Dacca 2
Bangladesh.

ICDDR,B BOARD OF TRUSTEES MEETING HELD

The Sixth meeting of the Board of Trustees of the ICDDR,B was held in Dacca on 14 and 15 June 1982.

The Board during its meeting reviewed the activities of the Centre including its financial position. Dr. J. Bradley, Director of Ross Institute of Tropical Hygiene and Professor of Tropical Hygiene, London School of Hygiene and Tropical Medicine, London, has been unanimously elected as Chairman of the ICDDR,B Board of Trustees for 1982-83. Dr. Yoshifumi Takeda of Research Institute for Microbial Diseases, Osaka University, Japan has been elected as Member of the Board of Trustees from 1982.

NOTES ON THE DIFFICULTIES OF DIARRHOEA MANAGEMENT IN A PUNJAB VILLAGE

This report gives a short account of Dr. Joyce Pettigrew's experience related to oral rehydration in a Sikh village (Southern Punjab) with a population of 1,200 over a period of 9 months. Dr. Joyce Pettigrew is a Senior Lecturer in the Department of Social Anthropology, The Queen's University of Belfast.

Out of 75 children aged under two in the village 55 were observed, 41 were in the process of being weaned (19 of these children were being weaned on to tea, 13 on to tea and a little milk and nine were given pure milk). Only five of the 14 children under one were bottle-fed since their mothers had no breast milk. Four of these five children had diarrhoea.

Twenty children under two who were losing upto five days per month in diarrhoeal episodes, in all seasons, i.e. during the winter, hot dry and hot wet months. These families were visited at least twice a week, sometimes daily, rest were visited once a week. None of these children became dehydrated quickly, i.e. in a matter of hours. Usually stools were yellow and runny. In three of the cases the stools were green. They were commonly treated by the doctor with tetracycline. Diarrhoea was most persistent among children having a difficult transition to food and with symptoms such as respiratory infections, heavy colds with mucous accompanied by catarrhal cough, colds, bronchitis, pneumonia, ear infection.

Despite oral rehydration being portrayed as a simple remedy, a marked reluctance by the women to use this method was noticed. The experience in oral rehydration in these households revealed that the women had no patience to wait for the remedy to take effect and they tended to favour a quicker and dramatic remedies such as antibiotic administered preferably by injection. Punjabi culture is one of quick action and if results are not immediately forthcoming medicine is assumed to have no power. Another difficulty encountered was that in the preparation of the rehydration mix and in its administration a woman's active participation was involved in which they had hardly any training and hence no confidence.

Packets of the rehydration mix were not on sale either in the hospitals in Ferozepur nor in other shops. They were stocked by one chemist only, and that too not in any great quantity (they were packed under 'Emlyte' label and contained the required amounts of sodium chloride, sodium bicarbonate, potassium chloride and glucose). Each packet contained enough to make two litres and cost between Indian Rs. 6–8 (US $ 0.66–1.00) which is nearly a day's wage for a labourer. Only one mother in the village had purchased the mixture, the rest made the mixture in their homes. (Even if the packets were more readily available, the same difficulties would be faced by mothers who made their own rehydration mixes). The difficulties faced by women generally were: there might be no bottle in the house to measure the water; the bottle when found would not be clean, but the mother believed it could be cleaned, no matter what it contained before, by running cold water, often the bottles had no cork or stopper and in one case a rat toppled the mixture during the night. Most women, if not all, did not realize

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DIARRHOEA MANAGEMENT IN A PUNJAB VILLAGE

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the significance of boiling water. In addition the women had to remember: that the boiled water had to be left to cool; it had to be used up within 24 hours; to successfully administer ORS, these were most frequently forgotten and the water would be taken off the *chula* before it boiled. Women also forgot to boil the water when cooking the family meal or making tea in which case the water would not be boiled at all, especially when wood was scarce, and she had so many other activities she would avoid lighting a fire just to boil water.

When a woman successfully made and used the mixture, she was unwilling to show others what she had learned for several reasons: in case anything went wrong she would be blamed for interference; in one case where a woman successfully used oral rehydration and not drugs for her baby's diarrhoea, said she was not ready to share this with other mothers because cures were treated as personal belongings.

It was clear from these observations that preventive teaching must come first or at least go hand in hand with treatment. Very simple preventive measures should be taught and be accepted beforehand for the oral rehydration therapy to be effective. Foremost, among these was the use of boiling water as a cleansing agent for kitchen utensils, bottles, nails filled with animal dung, and unclean nipples with which a baby had prolonged contact as also the needles with which injections were given. People failed to notice that kitchen utensils and dishes were covered with dust and dirt. There were occasions when a mother was seen putting water or the baby's milk into a pot which contained particles of earth or a layer of dust. Often spoons were picked up from the mud of the courtyard and used to stir milk. The contaminating effect of the dust was not appreciated. On a number of occasions when putting ointment on a child's wound, some of it fell to the ground and the mother-in-law or some member of the family would lift it up and save it for future use covered in dust as it was. The villagers probably believed medicine could not be contaminated. And in any case they frequently cleaned their children's bottoms with earth. Maybe both of these things explained their careless attitude towards the dust and earth of the courtyard.

It is likely that many of the diarrhoeal episodes among children could be prevented if mothers were taught about the cleansing effect of boiling water and the infections that are carried by the dust. With this knowledge mothers could administer oral rehydration treatment more effectively when diarrhoea occurred.

JAPANESE EQUIPMENT FOR ICDDR,B

Mr. Hirohiko Otsuka, the Ambassador of Japan in Bangladesh formally handed over the first consignment of scientific equipment to the Director of the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) at a simple ceremony at ICDDR,B premises on April 28, 1982. These equipment costing approximately US $ 100,000 are required for scientific research and treatment of patients and have been provided under the Technical Assistance Programme of the Government of Japan. The Government of Japan recently announced their participation with the ICDDR,B and made a contribution of US $ 200,000 to the Centre for FY 1982.

The handing over ceremony of the Japanese equipment.

Dr. W.B. Greenough III, Director, ICDDR,B thanked the Government of Japan and the Ambassador for their support and hoped that Japan will continue their support. The Ambassador in his brief address assured all financial and technical assistance from his Government. He also expressed satisfaction with the activities of the Centre.

For GLIMPSE or any other publications of ICDDR,B please write to:

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