



INFORMAL CONSULTATION ON RESEARCH PRIORITIES
IN DIARRHOEAL DISEASES IN EGYPT

EM/CON.DDR.EGY/11

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DIARRHOEAL DISEASES RESEARCH CENTRE, ALEXANDRIA
ALEXANDRIA UNIVERSITY CHILDREN'S HOSPITAL (EL-CHATBY)

Programme of training Physicians and Nurses working in Child Health
Centres and Institutes on Oral Rehydration

I - RATIONALE:

Diarrheal diseases are one of the major causes of morbidity and mortality in most developing countries particularly in young children. They are major contributors to malnutrition. Diarrheal diseases are also considered the leading cause of infant preschool mortality in all developing countries including Egypt. Gordon et al. (1974) reported that diarrhea accounts for more than 60-75 % of the cases seen or admitted to health centers and outpatient department and for more than 50 % of all fatalities below 2 years of age. More than a third of the attendants to the outpatient clinics come for gastroenteritis.

The prevention of diarrheal diseases needs a multidiscipline approach entailing environmental sanitation, health education, nutrition, etc.. So, this might require community development which will take rather a long time. Nevertheless, prevention of mortality from diarrhea can be attained if proper management of diarrheal cases is adopted. This requires proper training of the health team as well as mothers to be able to correct dehydration through early replacement of water and electrolyte losses, to maintain adequate nutrition and to carry nutritional rehabilitation when severe malnutrition coexists. The latter is the responsibility of the physician.

Among the responsibilities of the DDRCA at the Alexandria University Children's Hospital (El-Shatby) is the training of all those working in the field of child health, whether physicians or nurses, on the management of acute diarrheal diseases and on the communication of their knowledge to mothers and health auxiliaries.

II - LEARNERS CHARACTERISTICS:

- 1- Physicians working in pediatric hospitals, MCH centers, rural health units and centers.
- 2- Different levels of nurses working in child health set ups.

III - TRAINERS :

All trainers will be university staff; specialists in pediatrics and child health who have the experience in child health particularly in diarrhea, its curative and preventive aspects as well as its nursing care.

All of them have been oriented with the objectives of the programme.

IV - CURRICULUM :

The curriculum is designed to change the behaviour of both doctors and nurses. The term behaviour here is used in the broader sense to include thinking, acting and performance. Emphasis is based on skills required to manage rehydration and to communicate with and educate mothers and other personnel to manage rehydration for the sick child. The curriculum stresses on ways of assessment of dehydration and how to correct or prevent dehydration. It focuses on methods of maintaining adequate nutrition and on how to carry nutritional rehabilitation. It also provides skills in communicating trainees' knowledge and skills to mothers particularly in managing mild dehydration, in feeding their babies and in hygienic practices related to feeding and rearing practices.

V - OBJECTIVES :

1-General objectives:

By the end of this course, learners will be able to manage acute diarrheal cases properly in order to minimize mortality and complications from diarrheal diseases.

2- Specific Objectives :

(a) For Physicians

1. Define diarrheal diseases.
2. Discuss the magnitude of the problem in developing countries, particularly Egypt.
3. Realise the seriousness of diarrhea through projection of the morbidity and mortality rates.
4. Discuss the etiology of diarrhea and identify the etiological cause of diarrhea (infective and non infective).
5. Identify normal body fluid compartments.
6. Describe the pathogenesis of acute diarrhea whether bacterial, viral or else.
7. Identify the water and electrolyte disturbances of dehydration.
8. Compare between the effects of malnutrition and gastroenteritis or the combination of both on the total body water, sodium, potassium, Extracellular water and intracellular water.
9. Take full history from mothers in relation to the health of her child.
10. Examine at least 4 children : one healthy child, a malnourished child, a diarrheal case and a child having malnutrition and gastroenteritis. This aims at identifying cases of diarrhea.
11. Given 4 children, one of them not suffering from gastroenteritis and the other 3 diarrheal cases with mild, moderate and severe dehydration, learners can assess in these 3 cases the degree of dehydration and report about each and outline their management.

12. Given 3 cases of diarrhea : mild, moderate and severe learners will be able for each case to :
 - a - administer rehydration therapy.
 - b - Prescribe their feeding.
 - c - Discuss with nurse and mother:
 - 1) Rehydration treatment.
 - 2) Feeding principles.
 - 3) Personal hygiene.
 - d - Realise the urgency of dealing promptly with mild, moderate and severe dehydration and the importance of early diagnosis and rehydration of cases.
 - e - Prepare O.R.S. correctly.
 - f - Introduce O.R.S. to at least 3 children using nasogastric tube when this is indicated.
 - g - Administer I.V. fluid therapy to at least 3 children in need of such therapy.
 - h - Educate at least 3 mothers about the signs and symptoms of diarrhea and how to prepare O.R.S. properly, and its technique of administration slowly and at frequent intervals.
13. Given 3 cases of diarrhea : to be able to follow up these cases until discharge or to the end of the training period, and to report on the progress and on the course of treatment of these cases. The report should include :
 - a - Full history of the case.
 - b - Clinical assessment and diagnosis.
 - c - Therapeutic intervention.
 - d - Nutritional status and any nutritional rehabilitation.
 - e - Informations given to mothers about diarrhea, rehydration, nutrition and hygienic measures.
 - f - Evaluation of the progress of the child and change in behaviour of the mother achieved by the learner.

(b) For Nurses

- 1 - 8 : Same objectives as for physicians.
- 9 - Given 5 cases of mild dehydration and 5 cases of severe dehydration, to be able to identify each case accurately.
- 10 - Prepare O.R.S. properly.
- 11 - Administer O.R.S. slowly and at frequent intervals by spoon or bottle accordingly and correctly for at least 4 cases in need of such care.
- 12 - Teach 4 mothers the correct way of dealing with mild cases of diarrhea.

- 13 - Give effectively nursing care to 3 cases of diarrhea : mild moderate and severe during the days of the programme and report on these cases. The reports have to cover:
- a - Full history.
 - b - Clinical assessment.
 - c - Nutritional status and feeding.
 - d - Informations given to mothers and nursing care rendered.
 - e - Evaluation of the progress of the child and skills given to mothers in relation to rehydration, feeding and hygienic practices.

VI - STRATEGY :

Different instructional formats are used. As the objective of the course is to give skills and change attitudes of the health team, the group discussion method as well as the bed side instructions were used more. However, lecture-discussion was resorted to, to give academic knowledge.

Experimental learning was resorted to when skills in performance were aimed at. Hence the formats could be summarized as :

- 1 - Lecture-discussions.
- 2 - Group discussions.
- 3 - Bed side teaching.
- 4 - Experimental learning.
- 5 - Audiovisual :
 - a) demonstrations.
 - b) Patients.
 - c) Blackboard.
 - d) Overhead projector.
 - e) Slides.

VII - EVALUATION :

- 1 - Pretest to assess the knowledge of learners before the programme.
- 2 - Observation during group discussion.
- 3 - Observation during clinical rounds and in performance of skills learned.
- 4 - Check list and rating scales for psychomotor skills gained.
- 5 - Post test for cognitive objectives.

10.00 - 10.30 Break: Tea or Coffee
10.30 - 11.30 Lecture and group discussion: Prognosis and complications of diarrhea (Dr BETHAINA EL-DOMIATY)
11.30 - 13.30 Clinical round: Patient care at DDRC-A.

Day four (Tuesday)

9.00 - 10.00 Lecture and group discussion: Management of diarrhea - Oral and parenteral rehydration -antidiarrheals antibiotics ? (Dr ISMAHIL EL-ARABY)
10.00 - 10.30 Break: Tea or Coffee
10.30 - 11.30 Lecture and group discussion: Nursing care for infantile diarrhea (Dr GAMALAT MANSY)
11.30 - 13.30 Clinical round: Skills in prep. and administ. of O R S

Day five (Wednesday)

9.00 - 10.00 Lecture and group discussion: (DR LOUFPY EL-SAYAD)
10.00 - 10.30 Break: Tea or Coffee
10.30 - 12.30 Round Table Discussion: Establishment of an oral rehydration centre (Dr A. Kassem, Dr. I. El-Analy, Dr. L. El-Sayad, Dr. G. Mansy, Dr. A. Badr-El-Din, Dr. B. Massoud, Dr. A. Madkour, Dr. B. El-Domiaty and Dr. Taky I. Mourad) as well as all participants in the programme .

Day Six (Thursday)

9.00 - 10.00 Presentation of reports of trainees.
10.00 - 10.30 Break: Tea or Coffee
10.30 - 11.30 Closing session and evaluation of workshop