

Report On Training In 1983 By N.C.D.D.P.

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I Introduction:

Training of professionals in rehydration therapy, nutritional management and diarrhea control is an essential component of the NCDDP. Training of mothers on a face-to-face basis is also necessary to complement our efforts in education through mass media.

Training in 1984 may be summarized in the following categories:

1. Opening of new rehydration centers;
2. Training of physicians and nurses at established rehydration centers;
3. Development of a model for training of all personnel from individual Rural Health Units, Urban, and MCH centers;
4. Evaluation of training of professionals;
5. Development of training and educational materials for professionals;
6. Major conferences in different governorates;
7. Training of mothers;

These items will be explained in detail in this report. Also at the end of the report tentative plans for 1984 will be discussed.

II. Summary Of 1983 Training:1. Opening of New Rehydration Centers.

With assistance of Dr. Mathu Santosham (U.S.A.), Prof. Mahmoud El Moughi (Al-Azhar University), Dr. Hirschhorn (NCDDP), Dr. Samia Riyadh (ORT Coordinator, Alexandria), Dr. Mary Khalil Ibrahim (ORT Coordinator, Giza) the NCDDP provided training and equipment

to open eight new rehydration treatment and training centers:

- . Bab El Shaareya university hospital (Cairo).
- . Hossein university hospital (Cairo).
- . El Galaa teaching hospital (Cairo).
- . Om El Masreen Giza central hospital (Giza).
- . El Ramle pediatric hospital (Alex).
- . El Kebari polyclinic-hospital (Alex).
- . Siddi Bisher polyclinic (Alex).
- . Mansoura fever hospital (Dakhaleya).

It was determined that one week of intense practical experience and demonstrations led by an expert in rehydration was sufficient to give hospital staff the confidence to operate a total rehydration program. It was important to identify an energetic physician (or two or three) who would be in charge of the center under direction of a cooperative chief. Two centers benefitted, and greatly helped the NCDDP, by doing small but important clinical research projects.

Most important, the NCDDP now has an enlarged corps of Egyptian experts in ORT in addition to staff of El Shatby and Abu El Reesh centers, many of whom will, in turn, help develop other centers in Egypt.

2. Training of Physicians and Nurses at Established Rehydration Centers.

196 physicians in batches of 6-10 were trained in week-long courses at El-Shatby and Abu El Reesh rehydration centers;

362 nurses in batches of 8-15 received lectures at the NCDDP for five days and demonstration of ORT for one day at Om El Masreen hospital.

Several self criticisms may be made at the outset:

- . Too much emphasis was put on didactic lectures covering all aspects of diarrheal disease, not enough emphasis on actually doing rehydration.

- . The selection of candidates was left entirely to governorate MOH officials with no particular guidance from the NCDDP; as a result a number of candidates showed disinterest, failed to complete or even appear for the courses.
- . The nurses were selected without reference to whether physicians from their units knew any thing about ORT or had received training; as a result, the majority are unable to put into practice what they are taught.
- . There is no unified curriculum or content in the courses, or explicit listing of educational goals ; some professors advise naso-gastric tubes for most cases, some advise different drugs or feeding regimens.
- . So far there has been no followup of trainees to assist them in establishing their own rehydration centers with equipment, materials, technical or financial assistance; in fact, the NCDDP records have been kept in such a way as to require several days to determine who was trained and to which health unit or center they belong.

All these faults, once identified, are readily corrected and will be. Evaluation of the outcome of training is described in section 5, below.

3. Development of a Model for Training of all Personnel of Rural Health Units Urban and MCH Centers.

We tested a model for training (evaluation of outcome described in section 5, below) in which the complete physician and nursing staff - in one or two batches-dealing with children in a RHU or MCH clinic were brought to one of two rehydration training centers in Alexandria. They stayed for two to three days observing rehydration - in some cases doing it themselves-and education of mothers. Only one or two general lectures were given.

It was found that batches of 8-10 persons is the maximum that should be trained at one time; 6-8 are the preferred number. Three days training is the minimum. Some professionals (physicians, especially) are simply not interested in doing rehydration with their own hands. Some investigation into their reasons is needed.

4. Evaluation of Training of Professionals:

The implicit educational goals are:

- . Trainees are to set up rehydration centers in their own units or hospitals;
- . Trainees are to know when intravenous therapy is to be used;
- . Trainees are to teach ORT to their nursing staff;
- . Trainees are to provide health education to mothers;
- . Trainees are to reduce dependence on non-essential drugs;

Evaluation was done in two groups; 18 doctors trained for one week at El Shatby hospital in 1982 (a 15% sample from nine governorates) and 17 doctors from Alexandria trained at Ramle pediatric hospital for 2-3 days in 1983 (a two-thirds sample). The results are tabulated here.

	<u>Trainees</u>	
	<u>1982</u>	<u>1983</u>
1. N =	18	17
2. RHU	2	4
MCH Clinic	11	1
Health Center	1	3
Hospital	4	-
3. Supported with NCDDP equipment	39 %	100 %
4. Rehydration takes place in unit	50%	100 %

	<u>1982</u>	<u>1983</u>
5. Nurses know ORT	24%	47%
6. Nurses may start ORT on their own	33%	0
7. Mothers advised to continue breast milk	67%	74%
8. Mothers advised to continue food	78%	No Data
9. Mothers shown how to mix ORT	55%	0
10. Mothers shown signs of dehydration	22%	0
11. Doctor uses antibiotics, antidiarrheals routinely	44%	94%
12. Doctor knows indications for I.V.	79%	80%
13. What, in Doctor's opinion, could block use of ORT?		
Vomiting	60%	65%
Mother refuses	40%	57%
Liter too much	60%	43%
No equipment/ORS	0	70%

We also inquired what materials or equipment the doctors wished from the NCDDP. Virtually all the requests were appropriate and modest: simple ORT materials, educational materials for mothers, more space for a rehydration unit.

We also looked at stocks of oralyte in each unit, the number of cases seen in the previous two weeks, and average number of liter packs dispensed per case.

<u>Packs on hand</u>	<u>Cases in last 2 weeks</u>	<u>Packs/average case</u>
751	276	0.2
3547	118	1.2
2885	49	2.9
1620	132	0.3
4750	25	0.4
112	35	0.4
950	3	1.0
47	11	1.5
1091	15	3.5
14500 (local depot)	140	1.0
345	29	1.3
462	53	1.9
1000	47	1.6
1000	26	2.0
850	105	2.0
300	40	3.8
70	55	3.6
600	360	0.2

No correlation existed between stocks on hand, patient load, type of unit. Use of oralyte varied 19-fold.

The overall results are, however, encouraging: with little supply, followup and supervision 50% of trainees nonetheless establish ORT centers. One week of training appears to provide a more solid base of knowledge than do 2-3 days. Nurses and doctors from the same unit should be trained together. A better supply-need information system is necessary.

5. Development of Training and Educational Materials for Professionals

NCDDP has produced the following:

- . Newsletter
- . Nurses self-instructional manual (due summer 1984)
- . Treatment charts in Arabic and English
- . Treatment brochure in Arabic
- . 20-minute video film on ORT featuring four eminent pediatricians
- . Standard teaching slide set (35 slides) and lecture notes
- . Brochure for pharmacists

6. Major Conferences in Different Governorates

Presentations to audiences of specialists, physicians, pharmacists, nurses, social workers, ranging in size from 50-400, have been done in Assiut, Sharkia, Dakhaleya, Gharbia, Alexandria (2), Kafr El Sheikh, Cairo (6), Beheira. All were well received.

7. Training of Mothers

An experiment is nearly complete in which 500 mothers received training, using modern pedagogical methods, in diagnosis of dehydration and mixing of ORT. The evaluation is now underway. A flip chart for clinic use is now being prepared.

III. Tentative Plans for 1984

1. Rehydration Centers

We hope to train and supply 25 new centers in all University Hospitals and 15 Governorate Central Hospitals. These new

centers should attempt to train staffs from 10-20 RHU/MCH or Urban Clinics each in their vicinity.

2. We expect to produce a clinical training film on all modes of rehydration.
3. We hope to produce a self-instructional manual for physicians.
4. The newsletter should appear twice a year
5. We hope to send key planners, educators and pediatricians on observation tours of other national programs
6. A model rehydration training and research center is being developed at Abu El Reesh Hospital.
7. We hope to recruit several hundred volunteer medical students, train them in interpersonal communication and have them visit pharmacists and mothers at home, to promote ORT.
8. Physicians and nurses from key centers will continue to be trained at Shatby, Abu Reesh and (new to 1984) Bab El Shaa-reya Hospitals; improvements in selection, curriculum, management and followup are expected.