

PA 1816-354

Task Based Training
For
Physicians

DIARRHOEAL DISEASES MANAGEMENT

TRAINER'S MANUAL



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Task Based Training
For
Physicians

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INTENDED USERS:

All Trainers of NCDDF Task Based Inservice Training
for Physicians working in Rehydration Centers.

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TO THE TRAINER

- o Before you start using this manual go through the Trainer's Manual (General Introductory Section).

WHO SHOULD BE TRAINED USING THIS CURRICULUM

- o All practicing physicians working in primary health care facilities, hospitals outpatient departments and oral rehydration centers should be trained, as soon as possible using this curriculum.
- c All residents should be exposed to this task based curriculum. House officers could as well attend this course.

N.B.: This course focuses on ORT only. Another course will be carried out to train physicians to carry out the tasks required in case of Nasogastric and intravenous rehydration.

Section A: INTRODUCTION

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TASK-BASED INSERVICE TRAINING COURSE
FOR PHYSICIANS

THE PROGRAMME

DAY 1:

1. Registration
2. Opening session
3. Pre-test

T E A B R E A K

4. Diarrhoeal diseases: The magnitude of the problem - Actions to be taken to prevent and control them.
(LARGE GROUP DISCUSSION)
5. Scientific breakthrough of Acute Infantile Diarrhoea.
(FILM - LARGE GROUP DISCUSSION)
6. The operational framework of a Rehydration Center.
(LARGE GROUP DISCUSSION)
7. Equipment and utensil needed to carry out various tasks according to functional stations.
(SMALL GROUP DISCUSSION)
8. History taken: content and technique.
(LARGE GROUP DISCUSSION)
9. Communication and human behaviour.
(SELF LEARNING)

DAY 2:

1. Taking history.
(EXERCISE - ROLE PLAY)

T E A B R E A K

2. Applied practical learning in the Rehydration Center.
(PRACTICAL)
3. Essential Decisions to be made at the reception.
(INDIVIDUAL - THEN LARGE GROUP DISCUSSION)
4. Case Management of Acute Diarrhoea in Children.
(SELF LEARNING)

DAY 3:

1. Decisions that can be made from the history.
(LARGE GROUP DISCUSSION)
2. Management of Diarrhoea.
(LARGE GROUP DISCUSSION)
3. Applied practical learning in the Rehydration Center.
(PRACTICAL)

T E A B R E A K

4. The role of drugs in diarrhoea management.
(SMALL GROUP DISCUSSION)
5. Monitoring the progress of Diarrhoeal Cases During Initial Rehydration with Oral Therapy.
(SELF LEARNING)

DAY 4:

1. Dispensing Activities.
(LARGE GROUP DISCUSSION)
2. Applies practical learning in the Rehydration Center.
(PRACTICAL)

T E A B R E A K

3. Applied practical learning in the Rehydration Center.
(PRACTICAL)
4. Training and guiding mothers to care for their children with diarrhoea.
(SELF LEARNING)

DAY 5:

1. Health education messages - What & how.
(ROLE PLAY)
2. The process of mixing ORS.
(DEMONSTRATION)

T E A B R E A K

3. Practical applied learning in the Rehydration Center.
(PRACTICAL)
4. Educating mothers using the group approach.
(ROLE PLAY)
5. Discharging Diarrhoeal Cases after initial Rehydration
(SELF LEARNING)

DAY 6:

1. Exit interview.
(ROLE PLAY)
2. Records used in diarrhoea management.
(GROUP DISCUSSION - EXERCISE)
3. Storage of OHS.
(LARGE GROUP DISCUSSION)
4. Discharging patients.
(SMALL GROUP DISCUSSION)
5. Post test.
6. Closing session.

This Manual

This manual is to be used in conducting the **inservice task-based training course** for physicians. The objectives of this workshop and an overview of the the schedule as well as the agenda for the course are presented on the pages following this section. The equipment needed are also listed. You should be aware that the course is intended to give skills in carrying out the various tasks carried out by physicians working in hospital and non-hospital based rehydration centers. The skills to be learned are not only the doing skills but also the decision making skills and communicating skills.

The manual includes the daily plans of the course. These are organised according to the order in which they are to be given, since acquiring skills goes in a progressive pattern:

Each day the plan covers:

- o Objectives of the day.
 - o The **daily steps** explaining in detail the points you need to make in all the training activities. The daily plans are intended to serve as guidelines. You should follow them as closely as possible, but adapt them to the particular needs of your trainees and to the local situations. But always remember that your role is a skill builder and not a disseminator of knowledge.
 - o **Audiovisuals needed and handouts** for each session.
 - o **Guidelines and materials** for self reading.
 - o **Evaluation of daily activities.** You will always be reminded of what to do in relation to evaluating the daily activities. You will also be reminded of the check points for progress evaluation.
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As a trainer you should observe your trainees during the sessions. If a trainee is not actively involved, or he/she is not progressing as he/she should, you have to guide and help him/her. Try and motivate your trainees either by challenging them or by praising their performance whenever the chance comes. The trainees' level of performance and the skills learned are your true indicators of your success as a trainer.

At the start of the course you will do a pretest and at the end of this course your trainees will sit for a post-test.

EQUIPMENT AND SUPPLIES NEEDED _____

To conduct this course you will need some basic equipment and supplies. Some of these supplies depend on the number of trainees and the number of groups you will have.

Your equipment and supplies should include the following:

- o Blackboard
- o Chalk of different colours
- o Dolls (5) you can borrow these from friends
- o Overhead projector
- o Projector screen (you can use a white wall)
- o Slide projector
- o Access to photocopying machine
- o Access to a rehydration center and patients
- o Handouts
- o Tests and Observational Sheets

COORDINATION OF TRAINERS' ACTIVITIES _____

- o Trainers need to be thoroughly familiar with the documents and techniques used in this course.
- o Trainers must decide what criteria to apply in dividing the trainees into groups (e.g. background, experience, institutional or geographic affiliation and assigning their places which should be marked by name or cards.
- o Trainers should prepare themselves for daily assigned activities:
 - * Reread the relevant handouts.
 - * Read the guidelines of the day.
 - * Get a clear mental picture of how the session should be presented.
 - * Interact with all exercises presented and check their answers.
 - * Anticipate possible problem, questions which may come-up during the day's activities and try to foresee solutions and answers.
 - * If possible practice the session with a group of their colleagues.

PURPOSE AND OBJECTIVES OF THE TRAINING COURSE: _____

The purpose of this training course is to enable physicians working in rehydration centers to carry out their functions, activities and tasks efficiently.

By the end of the course each trainee will gain knowledge and develop skills necessary to carry out the following tasks in the rehydration center either on real patients or by working on case methods:

1. Do primary assessment:
 - o Take complete history
 - o Examine the child for manifestations of:
 - dehydration
 - other diseases and problems including malnutrition
 - o Determine the degree of dehydration
 - o Diagnose accompanying conditions (case methods)
2. Develop a complete management plan for acute diarrhoea:
 - o Decide on method of rehydration
 - o Decide on nutritional management
 - o Decide on drugs to be given and laboratory tests to be ordered
3. Initiate oral rehydration, and teach mothers to administer ORS.
4. Monitor the progress of oral rehydration:
 - o Assess the patients' progress periodically
 - o Supervise mothers and nurses giving ORS
 - o Deal with difficulties in administering ORS (case methods)
 - o Determine success or failure of ORS (case methods)
 - o Decide to switch patient for IV therapy (case method)
 - o Decide to switch patient to nasogastric therapy (case method)
5. Educate and train mothers on:
 - o How to mix ORS
 - o How to administer ORS
 - o How to maintain hydration
 - o Feeding during and after diarrhoea
 - o Dangerous signs of dehydration
 - o Prevention of diarrhoea
 - o When to come back for follow up
6. Carry out an exit examination and interview.
7. Check the preparation and arrangement of the rehydration center and re-arrange it properly.
8. Check the storage of ORS in the center and identify packets that should not be used and advice for proper storage.
9. Interpret the validity and accuracy of the data recorded and appreciate the importance of these data.

METHODOLOGY AND AIDS: _____

Different training methods will be used in this course. Among these methods are the large and small group discussions, role play, demonstrations, short presentations, individual work, clinical rounds, practical classes, guided self reading ... etc.

There are five self instruction units that will be distributed. You will also use the Scientific Breakthrough In The Treatment Of Acute Infantile Diarrhoea, a 30-minute film-video cassette.

Various transparencies are also ready for your use. All discussions that are enclosed in a box have transparencies.

The blackboard can be used to clarify points for stating directions, or listings responses from the trainees.

Exercises and directions can as well be written on transparencies.

COURSE EVALUATION: _____

1. **Pretest:** This is designed to test enabling knowledge and thinking skills. It is helpful to alert trainees to what they will be expected to learn.
2. **Progress tests:** These will be carried out at specific check points to assess skills learned. Different types of tests will be used:
 - o Objective questions
 - o Case histories
 - o Check lists-rating scales
3. **Activity checklists:** These are designed to evaluate the course. They should be kept for each trainee.
4. **Post-test:** This is carried out at the end of the course and assess whether participants gained the required knowledge and the thinking skills required, or not.
5. **On-the-job (Follow-up evaluation):** This is important and it will indicate whether the course was successful in filling the gaps between knowing and doing.

The following is the evaluation plan. You will follow it all through.

EVALUATION PLAN

DAY

Outcome of discussion
Pretest

1

Introductory

Outcome of discussion
Progress test 1
Observational test

2

Taking History

Outcome of discussion
Progress test 2&3
Observational test
Management plan

3

Carrying out tasks
at the reception
area

Outcome of discussion
Progress test 4
Observational test
Management plan

4

Carrying out tasks
at reception,
dispensing &
treatment area

Progress test 5
Observational test
Management plan

5

Carrying out tasks
at the treatment &
educational areas

Outcome of discussion
Observational test
Post test

6

Carrying out tasks
for discharging
patients

Day 1: _____

----- OBJECTIVES -----

- o Identify the magnitude of the problem of diarrhoea, and means to deal with the problem
- o Identify and list behaviours that are related to diarrhoea incidence prevention and control
- o Define diarrhoea and dehydration and identify the scientific facts for management of diarrhoea and dehydration
- o List signs and symptoms of dehydration
- o Describe the operational frame work of a rehydration center. Its arrangement and activities
- o List the tasks that should be carried out by the physician
- o List equipment needed to accomplish activities according to frame work.
- o State essentials in taking history:
 - content
 - techniques
- o Identify the principles of communicating and interviewing

EQUIPMENT AND SUPPLIES

1. Overhead projector
2. Transparencies (Nos. 1 - 11)
3. Blackboard
4. Film- video cassette
5. Video apparatus
6. Self instruction unit No.1 titled: Communication & Human Behavior in Diarrhoea.
7. Handout (1&2)
8. Pretest

Evaluation:

- Pretest.
- Outcome of discussions.

7.

Session 1: Introductory (8:00 - 10:05)

1.1 Registration (8:00 - 8:30)

1.2 Open the course (8:30 - 8:45)

o Welcome participants and introduce yourself

o Introduce the objectives of the programme

- State the objectives

- Review the **programme outline** including the expectation that there will be high proportion of participation in group and individual learning. Explain that all trainees have to attend at 8 o'clock A.M. Emphasise that this course is different from any other course they had previously attended. It does not focus on knowledge but on **skills**. All prerequisite reading will be done at home. Each day they will be evaluated and their progress will be noted. Tell them that to start with, there is a **pretest**. The pretest is not meant to examine them, but to evaluate the course. Tell them that sharing answers will give false impressions and information. Tell participants that results of pretest will not be taken against them. It will only help them to modify the course to focus on their needs.

Allow one hour. At the end there will be a post-test. Explain that the post-test will assess their knowledge and thinking abilities. Progress tests will assess their attitudes, communication, manual and thinking skills.

Tell participants that skills learned will be useful as they can be applied in other areas they are engaged in.

1.3 Distribute **pretest**. Make sure that it is answered individually. Allow one hour [8:45 - 9:45].

1.4 Introduce trainers and trainees [9:45 - 10:00]

In a round robin, ask each of the trainee to introduce himself/herself stating where they work and what he/she expects from the course. Let the trainers also give their names and expectations

1.5 Make sure that the room is arranged as in Figure (1) page 7 in **Trainers Manual/General Introductory Section**.

1.6 Display the objectives of the day using transparency No 1.

1.7. Read the objectives slowly [10:00 - 10:05].

Session 2: Diarrhoeal Diseases [10:05 - 10:35]

2.1 State clearly the objectives of this session. Use transparency No. 2

----- OBJECTIVES OF THE SESSION -----

- o Identify the magnitude of the problem of diarrhoeal diseases in Egypt.
- o List actions that can be taken to prevent diarrhoea on the community and family levels.
- o Describe NCDDF goals, objectives and activities.

2.2 Give your presentation as follows:

----- PRESENTATION -----

Introduction:

Preview the information to be covered in your presentation.

- Magnitude of the problem in Egypt
- Factors and behaviours that predispose children to contracting diarrhoea
- Actions which can be taken to prevent diarrhoea and reduce its incidence
- The NCDDF goals, objectives and activities

Body:

Seg. 1:

Diarrhoeal diseases still constitute one of the chief problems in pediatric and public health in most developing countries. Although all age groups are susceptible to diarrhoea, yet the age group 3 months to 3 years is at highest risk of getting diarrhoea.

Epidemiologic studies in Egypt showed that the Egyptian child under three years may suffer up to 18 attacks of diarrhoea during his life, at least three of these bouts are serious. It was estimated that children under three years suffer from an average of 41.5 diarrhoea days per year of which an average of 25.2 are watery diarrhoea days.

Diarrhoea is also a leading cause of mortality.
(Fut Transparency No. 3)

Leading causes of mortality under 2 in Egypt:

- Diarrhoeal diseases	50% - 55%
- Respiratory diseases	25% - 30%
- Congenital Anomalies/ perinatal causes	8% - 12%
- Other causes	7% - 10%

Diarrhoea is the main killer of children after the 28th day of life. It accounts for 50% - 55% of deaths in children under two years. Each year more than 100,000 Egyptian children die from diarrhoeal diseases.

The effects of diarrhoeal diseases are more serious in young children under two years of age. This is because children have lower resistance to infection. Moreover, they are more susceptible to dehydration due to the greater proportionate insensible loss of fluids compared to adults. For example, loss of one liter of fluid represents 10% of a 10 kg. child, but only 1.67% of a 60 kg. adult. Also children in this age are less able to obtain fluids on their own.

Children who suffer from diarrhoea are of higher risk of getting respiratory tract infection. Moreover, malnutrition is one of the most serious complications of diarrhoea. It results in increased susceptibility of the child to subsequent bouts of diarrhoea as well as other diseases.

Seq. 2:

Now what are the factors that may increase risk of a child getting diarrhoea?

(Allow trainees to participate then show the transparency No. 4)

Factors Predisposing Children to Contracting Diarrhoea

In the Child	External to the child
1. Age	1. Lack of knowledge about proper hygiene
2. Bottle feeding	2. Lack of plentiful safe water and waste treatment
3. Early weaning	3. Hot weather
4. Malnutrition	
5. Measles	
6. Parenteral infection	

o Bottle fed children are more susceptible to diarrhoea as bottles are vehicles for infectious agents. This is due to the difficulty in sanitizing the bottle, particularly the nipple. There is always the potential contamination of the formula from the unhygienic water source. Early weaning may also introduce infection.

o Malnutrition and parental infections lower the general body resistance. Measles in particular is one important factor. There are two types of diarrhoea associated with measles. The first type starts between 1 week pre-rash up till 4 weeks post-rash onset. The second type is a post-measles diarrhoea which starts 4 - 26 weeks post-rash onset.

o Climate and weather are important factors. Pathogens, particularly food-borne bacteria thrive in hot weather. Hot weather promotes fly breeding. Lack of sanitation also is a predisposing factor.

Seq. 3:

Now what actions can be taken to prevent diarrhoea and reduce its incidence?

(Allow trainees to participate, then give feedback. Use Transparency No.5).

Measures which can be taken by the family

1. Continue breast feeding (for two years). Give supplementary feeding starting from 4th - 6th months.
2. If breast feeding is not possible, use a cup and spoon, and avoid bottle feeding if possible.
3. Use the cleanest water available.
4. Wash hands before preparing food for the child or feeding him.
5. Cover food.
6. Do not serve the child food which has been kept in room temperature.
7. Have the child vaccinated against measles.

Measures that can be taken by the community

1. Provide a plentiful water supply of safe piped water
2. Provide sanitary sewage disposal and treatment
3. Eliminate breeding places for flies.
4. Offer and promote measles vaccination.

Seg. 4:

The National Control of Diarrhoeal Diseases Project was launched to deal with the main killer of Egyptian children. The overall goals of the programme is to improve the health status of Egyptian children. The main objective of the project is to reduce by 25% child suffering and mortality from diarrhoeal diseases within a five year period.

The project of Egypt proved to be successful. It has achieved this success by making rehydration services and materials especially oral rehydration therapy (ORT) widely available and used through a national programme, with wide spread training of health care providers and mass media education of the community. The project concentrates its work in six areas:

- Research
- Training
- Marketing and Mass Media Education
- Production and Distribution
- Coordination and Implementation
- Evaluation

Once the project life comes to an end, all the present activities will be maintained through the regular activities of the Ministry of Health.

Conclusion:

Summarize: The incidence of diarrhoeal diseases is so high in Egypt. Its effects are more serious in young children. More than half the deaths among children under 2 years are caused by diarrhoeal diseases. The predisposing factors are within the child or external to him. Prevention requires a number of measures to be taken by the family or the community. To reduce the problem, the NCDDP makes ORT widely available and used through production, training and mass media education as directed by research and evaluation. To help achieving this objective, early and effective management is necessary.

- o Link this session to the next session
- o Thank trainees and close the session

Session 3: Scientific Break throughs In The Treatment Of Acute Infantile Diarrhoea [10:35 - 11:30]

3.1 State the objectives of the session

----- OBJECTIVES OF THE SESSION -----

- o Identify the recent advances in case management of diarrhoea and dehydration.
- o Define what is meant by diarrhoea and dehydration.
- o List the signs and symptoms of dehydration.
- o Discuss the mechanism of each sign.
- o State the best treatment of dehydration.
- o State what ORT means.
- o Explain why antimicrobials are not indicated in most of the cases of diarrhoea.

3.2 Introduce the film. List the important points that the film has covered:

- o Magnitude of the problem
- o The physiology and pathogenesis of diarrhoea
- o Recent advances in the management of diarrhoeal diseases

3.3 Show the film.

3.4 After the film ask the following:

 i. What do we mean by Diarrhoea?

Answer

Diarrhoea is a sign of many diseases rather than a disease in itself. When stools are looser and more frequent than usual, it is considered as diarrhoea. Any motion that is watery should be considered as diarrhoea.

2. What do we mean by Dehydration?

Answer

Dehydration is the loss of large amount of water and electrolytes. Dehydration can develop rapidly within few hours. Watery stools are almost always accompanied by dehydration.

3. What are the signs and symptoms of dehydration?

Answer

- Mild dehydration

Thirst

Any loss of watery stool is accompanied by some dehydration

- Moderate dehydration

Dry tongue

Sunken eyes

Depressed anterior Fontanelle

Loss of skin elasticity

Deep rapid breathing (acidosis)

Oliguria

- Severe dehydration

Shock

(Show Transparency No. 7).

4. What is the mechanism of each sign?

Answer

Thirst	: Water loss from the body
Dry tongue	: Water loss from the body
Depressed anterior Fontanelle	: Loss of both water and sodium
Deep rapid breathing	: Acidosis (excess amounts of hydrogen ions)
Oliguria	: Restricted blood flow through the kidneys and reduction in blood volume from sodium and water losses
Shock	: Severe loss of salt and water
Unconsciousness	: Severe loss of salt and water

Vomiting often accompanies diarrhoea. It is believed to be caused by sudden reduction in blood volume, by acidosis and possibly by loss of potassium.

Ileus, abdominal distension in the absence of bowel sounds, may also result from the loss of potassium.
(Show Transparency No. 8).

5. What is the best treatment of dehydration?

Answer

The only treatment of dehydration is replacement of lost fluids and electrolytes.

The ideal treatment of mild and moderate dehydration is ORT. The ORS contains all ions lost during diarrhoea sodium, potassium, chloride and bicarbonate. Glucose is added to increase the absorption of the water and electrolytes and to provide energy.

Intravenous therapy is still indicated when the child is in shock or in coma. But as soon as the child is strong enough to drink, intravenous should be replaced by oral therapy.

Nasogastric rehydration may be used in cases that are refusing ORS, or those who are suffering from repeated vomiting (5 times or more).

6. What do we mean by ORT?

Answer

ORT means both the use of oral rehydration and nutrition. Feeding should not be held for long during diarrhoea. The child with diarrhoea should be given foods and liquids consistent with his normal diet, as long as he is initially rehydrated.

7. Explain why antimicrobials are not indicated in most of the cases of diarrhoea?

Answer

The large majority of cases of diarrhoea are caused by viruses which are not at all responsive to antimicrobials or by resistant bacteria. Antimicrobials are useful in only a small proportion of cases and then only when specific causative agent has been identified.

3.5 Ask one trainee to summarize the important points discussed in the session. Then emphasise the following:

- o ORS is effective in treating dehydration in 85 - 95% of the cases. It should be considered the primary treatment of diarrhoea.

- o Continued feeding is an integral part of oral rehydration

- o Most antimicrobials drugs are useless and many are harmful. It should only be given when indicated.
- o To effectively manage acute diarrhoea, you should have an operating rehydration center.

3.6 Thank trainees and close the session.

Session 4: The Operation Frame Work Of A Rehydration Center
 [11:30 - 12:00]

4.1 State clearly the objectives of this session. Snow transparency No. 9.

----- OBJECTIVES OF THE SESSION -----

- o Define a rehydration center
- o Describe how to arrange and operate a rehydration center
- o Realise the importance of having a well operated rehydration center
- o Describe the functional areas in the rehydration center and list the tasks to be carried out in each area

4.2 Use the question and answer technique in this presentation.

----- PRESENTATION -----

Introduction:

Preview the information to be covered in this session:

- Definition of a rehydration center
- Arrangement and operation of the center
- Importance of having a well operated rehydration center
- Functional areas and tasks carried out in each area

REMEMBER

- Distribute your questions equally among trainees.
- Don't question the group in a regular order.
- Try to avoid the temptation to answer the question yourself.
- Rephrase it: relate it more directly to an idea the trainee already understand and/or expand it with some explanations. Alternatively you could redirect the question to another trainee.

 QUESTION (1): What is a rehydration center?

Answer

A rehydration center is an especially designated room or area within an existing health facility. This facility may be a hospital or unit or a primary health care center. In this center infants and children having diarrhoea and suffering from dehydration are being rehydrated. The primary method of rehydration in a rehydration center is ORS.

State:

In a rehydration center, a primary assessment of the condition is carried out, also the management plan is written, but in contrast to any out-patient clinic a major portion of the treatment is conducted in the rehydration center. The child should be kept until he is initially rehydrated. This usually takes from 2 - 6 hours, where the child is continuously observed and his progress is monitored. HENCE THE SPACE OF THE CENTER SHOULD BE WELL ARRANGED.

 QUESTION (2): How can we arrange this space?

Answer

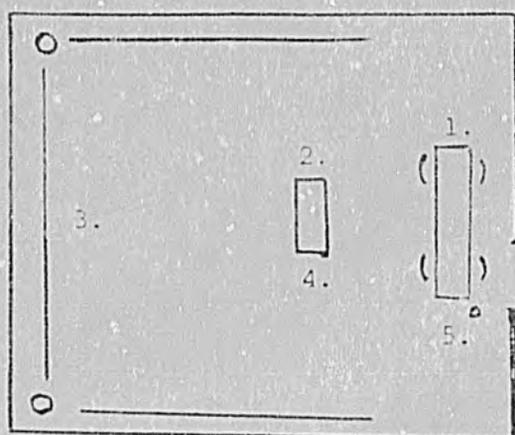
The space of the center is arranged so that there are 2 - 4 areas for management of diarrhoea cases.

- o Reception area, where cases are assessed and a treatment plan is written.
- o ORT area where ORS is mixed from packets, oral rehydration is administered and mothers are being educated.
- o Discharge area, where children are being examined, mothers interviewed, the child is discharged and may as well be referred.
- o Diarrhoea ward, where cases received treatment with intravenous or nasogastric therapy.

State

Diarrhoea wards are only found in hospitals. In small centers the area used for reception can be used as well for discharging patients.

Show the transparency or draw the following diagram



1. Reception
2. Dispensing
3. Treatment
4. Education
5. Discharging

QUESTION (3): How can one operate the rehydration center?

Answer

To operate a rehydration center efficiently, you have to identify the different tasks carried out by health personnel. The center should be operated according to the tasks.

Explain

You should place tasks that are carried out in the same time and by the same person in the same place. This means that you should arrange the center according to tasks and create functional areas or stations. Organizing the center according to these areas is needed to ensure a good patient care. It will ensure a better control of flow of mothers and their children. It promotes a smooth working environment and facilitates supervision and training.

QUESTION (4): What are the advantages of a well operated rehydration center?

Answer

- Better control of patient flow
- Promotes a smooth working environment
- Assures that patients receive the care they need promptly
- Facilitates supervision and training

State

Treatment of dehydration due to diarrhoea includes two phases. The **initial rehydration phases**, in which the original water and electrolyte deficits are made up. This phase should be done in the center and under the physician's supervision. The **maintenance phase** in which on-going losses of water and electrolytes are replaced. This phase takes place at home, and is carried out entirely by the mother.

QUESTION (5): What are the main tasks that are carried out at the reception (intake)?

Answer

- Taking a complete history
- Examining the child
- Interpreting findings
- Ordering laboratory tests
- Decide on management plan including nutritional management
- Carry out different communication activities
- Recording

QUESTION (6): What are the tasks to be carried out in relation to dispensing ORS?

Answer

- Checking the dispensing and distribution of ORS
- Instruct mothers how to administer ORS
- Check if nurse really keeping track of the number of ORS cups given to individual mothers

QUESTION (7): What are the tasks to carried out in ORS treatment area?

Answer

- Educate mothers on how to administer ORS
- Give ORS
- Monitor patient progress
- Refer patient for I.V or nasogastric, if indicated
- Educate mothers on how to manage diarrhoea and dehydration
- Educate mothers on diarrhoea prevention

QUESTION (8): What are the main tasks carried out in relation to discharging the patient?

Section B: DAILY ACTIVITIES

Answer

- Carry out an exit examination (re-assessment of the child)
- Screen mothers' knowledge
- Educate mothers on ORS mixing and administration, signs of dehydration, and how to prevent diarrhoea
- Reformulate the management plan if necessary
- Dispense and distribute supplies
- Make referrals
- Record and/or check data recorded

State

Physicians should check, supervise, guide and train nurses. Emphasise that the most important factors which will ensure that the initial rehydration is successfully accomplished is the team work among all health personnel and between them and the mother. Team work entails both the spirit of cooperation and the flow of essential information among the team members.

4.2 Conclusion

- Review the main points
- Link this session with next session
- Thank trainees and close the session

Session 5: Equipment And Utensils Needed To Carry Out The Various Tasks According To Functional Stations [12:00 - 12:45]

- 5.1 Arrange the training room for small group discussion as in Figure (3) page 8 in Trainers' Manual - General Introductory Section.
- 5.2 State the objective of the session. Write the objective on the blackboard.

----- OBJECTIVE OF THE SESSION -----

Discuss the equipment and utensils needed in each functional area.

- 5.3 Divide trainees into 3 small groups
- 5.4 Give each group the topic of discussion and distribute Handout

Group 1:

Discuss the equipment and utensils needed for assessing patient (reception or intake station) and for discharging patients?

Group 2:

Discuss the equipment and utensils needed for dispensing ORS and for carrying OPI treatment.

Group 3:

Discuss the equipment and utensils needed for educating and demonstrating as well as training mothers.

- 5.5 Explain to trainees that they are allowed 15 minutes to discuss their topic.
- 5.6 Let the small groups start their discussion.
- 5.7 While the discussion is being carried out observe the following:
- Who seems to be the group leader?
 - Is the leadership rotating?
 - Is everyone participating?
 - Do participants feel free to say what is really in their minds?
 - Are there many interruptions?
 - When an idea is presented to the group, is it immediately explored further or dropped?
 - Who do people look at when they speak?
 - Is there any attempt to summarize and pull together various ideas?
 - Do people try to clarify and interpret suggestions and ideas?
- 5.8 Let each group presents the outcome of the discussion.
- 5.9 Let trainees discuss the outcome and give feedback.

EQUIPMENT NEEDED FOR RECEPTION (INTAKE) AND DISCHARGE

- Two chairs
- Examining table
- Weighing scale
- Tongue depressor
- Flash light
- Sterile cotton and drum
- Two sets of thermometers (buccal and anal)
- Stethoscope
- Disposable syringes
- Running water-basin and water-soap-towel
- Alcohol
- Growth chart
- Guidelines, posters, educational materials
- Register book
- Cards for referrals
- Waste basket

EQUIPMENT NEEDED FOR DISPENSING ORS

- One chair
- One table
- Towel
- One colomen
- Two pitchers
- Clean cups and spoons
- Enough small packets of ORS
- Waste baskets
- Monitoring tags/marks
- Tapes
- Guidelines

EQUIPMENT NEEDED FOR ORAL REHYDRATION

- Enough chairs
- Enough waste baskets
- Enough towels
- Stethoscope
- Thermometer
- Guidelines, instructions

EQUIPMENT NEEDED FOR EDUCATION AND DEMONSTRATION

- A table
- 5 - 10 chairs
- Pictures, posters, educational materials
- containers as what is found at home
- 2 - 3 empty soft drink bottles
- 3 sets of spoons of different sizes
- Guidelines and instructions

5.10 Ask trainees how can a physician check that the nurse has prepared properly the equipment?

5.11 Emphasis that the correct answer is to observe what has been prepared. The doctor should use a check list.

5.12 Show an example of a check list: use Transparency No. 11.

----- PREPARE EQUIPMENT FOR ORAL REHYDRATION CHECK LIST -----

<u>CRITERIA</u>	<u>DONE</u>	<u>NOT DONE</u>
o Enough chairs (all sitting)	[]	[]
o Enough waste baskets	[]	[]
o Enough towels	[]	[]
o Stethoscope	[]	[]
o Thermometer	[]	[]
o Guidelines, instructions	[]	[]

5.13 Thank the trainees and close the session.

Session 6: History Taking (12:45 - 1:30)

- 6.1 Arrange the room for large group discussion as in Figure 1 page 7 Trainers' Manual - General Introductory Section.
- 6.2 State the objectives of the session. Write the objectives on the blackboard.

----- OBJECTIVES OF THE SESSION -----

- o Identify communicating skills needed for taking history.
- o List specific information to be obtained from the mother during taking the history.

- 6.3 Explain to trainees that taking the history is one of the most basic important skill that physicians acquire. State that it is a dynamic process where the doctor asks a question, and the mother listens then responds to the question asked. The Physician has to listen carefully to the mother then respond.
- 6.4 Ask trainees what skills are needed to take history?
- 6.5 Allow trainees to respond then emphasise the answer by stating "Taking the history needs communicating skills".
- 6.6 Ask trainees what are the skills needed to communicate effectively?
- 6.7 Allow maximum participation then write down the following on the black-board:
- Present message clearly
 - Listen and pay attention to what the other person is saying
 - Observe carefully to be sure that the person understands the message
 - Check ones' understanding
 - Express and describe feelings
 - Seek, offer and share information
 - Give and receive feedback
 - Suggest alternatives or different ways to behave
- 6.8 State that taking the history means that the physician should obtain specific information from the mother.

The data collected are related to the:

- o Child
- o Diarrhoea and dehydration
- o Management provided

6.9 Divide the trainees into three groups. Let each group discuss the data needed as follows:

Group A: Information related to the child

Group B: Information related to diarrhoea and dehydration

Group C: Information related to the management provided

6.10 Allow 15 - 20 minutes for the group to discuss the data required, and observe them.

6.11 Let each group present the outcome of their discussion.

6.12 Let trainees comment.

6.13 Give feedback.

FEEDBACK REQUIRED DATA IN HISTORY TAKING

- o Age of child in month, birth date
- o Usual normal frequency of stools per day
- o Usual consistency of stools
- o Frequency of stools passed today
- o Consistency and character of stools passed today
(loose, foul smelling, bulky, presence of blood and mucous)
- o Duration of diarrhoea from start of loose frequent stools
- o Vomiting: present or not
(if present: frequency, duration, appearance)
- o Fever: present or not
- o Other complaints such as cough, difficulty in swallowing, difficulty in breathing, or discharging ears
- o ORS given or not
(if given: since when, from where it was obtained, how was it prepared and how much ingested, if stopped why?)
- o Drugs and medicine given or not
(if given: the name or shape "syrup, injections, powder .. etc", Who described it, from where it was obtained, the dose)
- o Feeding*: - Breast feeding: duration
 - Artificial feeding: when did she start, type of formula, amount
 - Introduction of solids: when did she start, type of foods, amount
- o Foods given during attack, kind and amount, and since when
- o Fluids given during attack, kind and amount, since when, and if started for how long

6.14 Conclusion:

- This information should be done in systematic manner and without any leading questions
- Emphasise that all data obtained should be recorded carefully and completely. The data obtained are necessary for the decisions made in case management

Session 7: Closing Session

- 7.1 **State:** To-day we have covered the magnitude of the problem - scientific background, and management of diarrhoea and dehydration, the rehydration center, its activities and equipment.
We have also discussed the data to be collected concerning history. You are required to read the Self Instructional Unit on communication and behaviour. You have also to answer the exercise in Handout 2.
- 7.2 To-morrow you will have your first progress test. Then you will play role and take history. Also you will take history from mothers, diagnose different dehydration signs and check the equipment needed.
- 7.3 Thank the trainees . Distribute Self Instruction Unit 1 titled: Communication and Human Behaviour, and Handout 2

- 1.1 Open the daily activities of day 2. Welcome the trainees.
- 1.2 Display objectives of the day using Transparency No. 12. Then tell the trainees that before we proceed we have to make sure that we have learned yesterday's topics. Explain to trainees that they will respond to the first progress test.
- 1.3 Testing trainees:
 - o Distribute Progress Test 1
 - Make sure that trainees are responding to the test individually.
 - Allow 8 minutes and then collect the answers
 - Give immediate feedback. The answer of the test is in Section E to written tests.
 - o Discuss answers of Exercise 1 distributed yesterday
 - Ask one trainee to read to the group his own answer to Exercise 1 in Handout 2.
 - Allow trainees to respond
 - Summarize the main points as follows:
 - * The doctor should have asked if the stools contain any blood and mucus or not
 - * Did "Hashem" vomit or not? If he did the frequency, duration, and the appearance of vomitus
 - * The history given was complete as regards feeding
 - * The doctor should have asked if ORS given or not, if given from where did the mother obtain it, how was it prepared, and how was it given to the child?
 - * He should have questioned the mother about drugs? If any drugs were given, shape of drug or name, dose, who prescribed it, and from where did she obtain it?
 - o Communication skills:
 1. In the large group ask trainees what are the essentials needed for communicating effectively?
 2. Let trainees respond
 3. Write down their responses clearly on the blackboard
 4. Get sure that they mention the following:
 - Establish a relationship
 - Talk and present your message clearly
 - Listen and pay attention to what the other person is saying or doing
 - Observe carefully to be sure that the person understands the message
 - Discuss and clarify anything that is not clear

- 2.1 State objectives of the session clearly. Write down the objectives on the blackboard.

----- OBJECTIVES OF THE SESSION -----

- o Criticise history taking during a role play using observational sheet.
- o Role play and take a complete and proper history.

- 2.2 Demonstrate standard history taking via behaviour modeling:

- o Brief the trainees about the role play. Tell them that in this session they will act out spontaneously the parts given to them. Reassure them about their nervousness and anxieties.
- o Select one of your colleagues or a person whom you think will be most at ease or ask for someone to volunteer to play the role of the doctor (the protagonist, the one with the skill burden).
- o Tell trainees that you will play the role of the mother (counter part). In this way you show trainees what role playing is all about. Also it gives them emotional support and relieves their anxiety, as it will show what you as a trainer is willing to take risks and embarrassment.
- o To enable the trainees to focus on the application of the knowledge and not get stuck because of lack of factual knowledge, read the following:

This is a Rehydration Center located in a District Hospital. Many of its patients come from rural areas. Patients are screened in the outpatient and referred to the Rehydration Center.

Once at the Rehydration Center, physician routinely takes a history from the mother and does the primary assessment on the child while the nurse takes the temperature and weighs the child. This woman and child have just entered the center. They stand before the physician waiting to be seen.

- o Tell the person who will play the role of the doctor the following:

You are the physician assigned to the Rehydration Center. This case is before you. You will take the history.

- o Ask him to go out of the room and try, and step into his role.

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- o Tell the trainees your role.

You are the neighbour of the child's mother. The mother came to you this morning because the child had Diarrhoea since yesterday; she was afraid. Since you paid attention to the messages given by "Karima Kokhtar" on the TV you told her that she must go to the Rehydration Center. Then you remember that she had a job and needed the money so you offered to take the child to the Rehydration Center.

You did not get the details of the case from the mother. Only that the child has had watery diarrhoea since yesterday. You are rather an average country woman. You have not attended school. You were raised to be polite and to answer questions when asked. Not to answer a question when asked is considered rude and one must particularly tell the asker what you think they want to hear. You have faith that doctors know everything and you know nothing of importance in matters of treatment.

- o Distribute the checklist-content of history (Handout 3-a) to half the trainees and history taking rating scale (Handout 3-b) to the other half.
- o Explain to all trainees that their role will be to observe the role play and use the distributed tools as a guide.
- o Allow five minutes for the players to get into their roles and the observers to read the documents distributed.
- o Do the enactment.
- o Conduct the debriefing and post-enactment discussion.
 - First ask the person who plays the role of the doctor to express his/her feelings. Let the person express the difficulties he/she was facing in communicating with the woman.
 - Then start and express your own feelings as a mother. State what information you were unable to give and why? Was the doctor giving you leading questions? Did he listen carefully to your answers? Did he seem interested and keen? What was his attitudes towards you?
 - Ask observers about their reactions and feelings about the role play. The accuracy of information provided by the doctor. The communication skills and how far was the doctor able to get the information. Did he realise that the woman is not the mother? Ask them about the attitudes of the role players (the doctor and the mother). Can they comment about the beliefs of mothers on diarrhoea and dehydration.

- o Ask trainees what different things were learned through role playing
 - Ask trainees what went wrong/well?
 - Was the doctor capable of asking all questions?
 - Was he able to communicate?
 - If the doctor was sympathetic to the mother, was he ready to listen to her, and if not why?
 - What attitude should the doctor have towards mothers?
 - What attitude should the mother have towards the doctor?
- o Summarise and write down the main points on the blackboard.

2.3 Carry out Multiple Role Exercises

- o Arrange the training room as in Figure 4 in page 8 in the Trainers' Manual - General Introductory Section.
- o Break the large group into five small groups of threes
- o Tell them to decide among themselves who will play the protagonist (the doctor) and who will play the counterpart (the mother), and who will be the observer.
- o When the roles have been assigned, distribute the briefing documents (SET 1), Handout 4-a,b,c.
- o Allow 5 minutes for the players and the observers to read the documents and to step into their roles.
- o Allow the players to do the role and make sure that the players do not step out of character.
- o Start debriefing and conduct post-enactment discussion in each group. Use as many facilitators as you can.
- o Ask players to switch their roles and start again with the second role play using documents (SET 2), Handout 5-a,b,c.
- o Let the groups do the enactment, debriefing and post-enactment discussion.
- o Ask players to switch their roles. Make sure that all trainees have a chance to play the role of the physician. Start again with the third role play using documents (SET 3), Handout 6-a,b,c.
- o Let the groups do the enactment, debriefing and post-enactment discussion.

- o Call the trainees back and rearrange the room for a large group discussion (Figure 1 in page 7 of the Trainers' Manual - General Introductory Section).
- o Ask trainees what important points were learned through role play?
- o Summarize the responses stating that to have accurate and complete information one has to have communication skills. Attitudes of doctors and mothers are as well important.

B R E A K [10:00 - 10:30]

Session 3: Applied Practical Learning [10:30 - 12:30]

3.1 State objectives of the session clearly. Show Transparency No. 13.

----- OBJECTIVES OF THE SESSION -----

- o Take a complete history from one mother.
 - o Act as critical observer for two history taking.
 - o Identify signs of dehydration in 10 diarrhoeal cases.
 - o Check equipment and arrangement of the center using a check list.
 - o Recommend ways for better operation of the center.
-

3.2 Ask trainees to go to the rehydration center.

3.3 Divide the trainees into two groups (group A & group B).

o For Group A: Carry out the following activities:

- Divide group A into small groups of threes.
- Ask one trainee in each group to take the history, while the other two will act as observers. They should use the check list and rating scale. Distribute Handouts 3-a,b.
- Allow 10 -15 minutes for the trainee to take history.
- Groups should be observed by facilitators.
- After 10 - 15 minutes ask trainees to switch so that by the end of 30 - 45 minutes all members of group A had the opportunity to take history from a mother and was a critical observer for two history taking.
- Collect the check lists and the rating scales and make sure that names of the trainees who filled the tools and the one that carried the history taking are stated.
- Give feedback.

o For Group B: Carry out the following activities:

- Let each trainees individually spot diagnose the signs of dehydration. Ask them to carry out the skin elasticity test.
- Give immediate feedback.
- Ask trainees individually to check the equipment and supplies of the center using a check list. Distribute Handout 7.
- Divide group B into two groups.
- Ask them to discuss the following:
 - * Are all equipment and supplies available?
If not why?
 - * Is the center well arranged or not?
If not how can we improve it?
- Allow 20 minutes for discussion.

o Switch groups so that at the end of 90 minutes each trainee would have carried the activities of group A and group B.

- 3.4 - Ask the trainees to return back to the training room.
- Ask the trainees to state their findings about the equipment/supplies and arrangement of the center.
 - Write down on the blackboard the important points stated.
 - Ask trainees what was their suggestions for improving the arrangement of the center.
 - Discuss their suggestions.
 - Conclude: the arrangement of the center is important to ensure efficient operation of the center, good patient care, and clinical management.

Session 4: Essential Decisions To Be Made At The Reception (Intake)
[12:30 - 13:45]

4.1 State the objective of the clearly, and write it on the blackboard.

----- OBJECTIVE OF THE SESSION -----

o Identify the importance of history taking, and essential decisions to be made at the reception area.

4.2 Write down the following on the blackboard or on a transparency:

You are the doctor of this rehydration center, a mother carrying her child enters the center. You turn your full attention to the patient. What decisions must you make before the patient leaves the reception area?

4.3 Ask each trainee to write down the answer. Then arrange the set of decisions in order.

4.4 Allow 10 minutes.

- 4.5 Ask the trainees in a large setting to respond.
- 4.6 Write the decisions to be made at the reception area according to their views.
- 4.7 Show transparency No. 14 which lists the essential decisions to be made at the reception area (intake).

----- ESSENTIAL DECISIONS TO BE MADE AT THE RECEPTION AREA -----

1. Does child require emergency resuscitation measures?
2. Does child need onsite rehydration?
3. Are there any conditions which require transfer out of the rehydration center?
4. What type of initial rehydration is required?
5. Are any laboratory tests required?
6. Are any medications required?
7. Are there any accompanying conditions that need to be followed during rehydration?

4.8 Review these decisions in terms of how they fit in with tasks done at the reception area.

4.9 Emphasise the following:

1. Any child who is not alert when entering the rehydration center should be immediately evaluated to determine whether emergency resuscitation is necessary. Postpone taking a detailed history.
2. Some children who are brought to the rehydration center do not have watery diarrhoea, or do not have diarrhoea at all, therefore, do not need rehydration at the center.
3. Some children have diarrhoea but also have other conditions which are more life threatening. These children should be transferred immediately for inpatient hospitalization or another unit which is better equipped to handle their problem.
4. When the primary complaint is watery diarrhoea, the major decision is what method should be used for initial rehydration: oral, nasogastric or intravenous?
5. If there is access to a laboratory, a decision should be made regarding the need to take specimens to send for laboratory testing. Except for microscopic examination, the following are

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6. At rehydration centers without laboratory facilities the decision whether to give medications is made on the basis of history.

In centers with laboratory facilities, the decision to treat cases of bacillary dysentery, amebic dysentery or giardiasis is still made on the basis of history taken, but should be confirmed in the laboratory. For parasites, however, the microscopic examination will be available during rehydration. So the decision to give metronidazole should be delayed, until the results from the laboratory are obtained.

7. Several conditions that are identified or suggested during the reception procedures need to be monitored carefully during the treatment period, because if they persist, should lead to a change in the management plan. These should be noted and emphasised for the staff responsible for monitoring treatment. They include things as repeated vomiting and drowsiness.

4.9 Conclusion:

Doctors working at the reception area should keep a mental check list of these **seven** decisions in mind for each case that enters the rehydration center. None of these decisions should be omitted unless they obviously do not apply.

Point out that when incoming mothers crowd around the examination table, or sit in the reception area and do not queue, seriously ill children of more timid mothers tend to get overlooked. You should and can make a quick visual triage of the cases-examining immediately any child you suspect that he needs immediate attention, then reorder the line so that apparently serious cases are moved ahead of milder ones. You should train your nurse to be able to do this task as well.

Session 5: Closing Session:

5.1 Ask one trainee to summarize the activities carried out.

5.2 Explain to trainees that they have to go through the Self Instruction Unit 2 titled "Case Management of Acute Diarrhoea in Children". The knowledge gained from this unit will be applied tomorrow.

5.3 Thank trainees .

----- OBJECTIVES -----

- o Identify important decisions that can be made from the history.
- o State uses of oral rehydration.
- o Identify cases that should be rehydrated by ORS.
- o State the rate of administering ORS.
- o List indications of intravenous and nasogastric therapy at the reception.
- o Describe essentials of nutritional management of cases of diarrhoea.
- o List indications of drugs and realise that drugs should not be given.
- o Assess and develop a treatment plan for at least two cases of diarrhoea.
- o Given several case histories of cases having initial rehydration will take correct actions and decisions as regard:
vomiting / sleepy child / thirsty child / child not drinking enough
or refusing ORS / cases that should be referred to diarrhoeal wards.

----- EQUIPEMT AND SUPPLIES -----

1. Overhead projector.
2. Transparencies: Nos. 15 - 21.
3. Blackboard.
4. Patients.
5. Progress test 2,3.
6. Observational sheets A - C.
7. Management sheet.
8. Self Instruction Unit titled: Monitoring the Progress of Diarrhoeal Cases during Initial Rehydration with Oral Therapy.
9. Diarrhoea Control Newsletter Special Issue .

Evaluation:

- Outcome of discussions
- Observational tests
- Management plans written
- Progress test 2 (content of history)
- Progress test 3 (case management)

Session 1: Introductory Session

[8:00 - 8:30]

1.1 Open day 3 activities:

[8:00 - 8:05]

- o Welcome the trainees
- o State the objectives of the day. Show transparency No. 15.

1.2 Evaluate your trainees

[8:05 - 8:30]

- o Explain: Now that you have completed an important unit in the course, we should know the extent of what you have learned.
- o Distribute Progress Test 2
- o Allow 15 minutes for trainees to respond to the test
- o Collect the test
- o Give immediate feedback. The answer of the test is in Section E. Answers to written tests.

Session 2: Decisions That Can Be Made From The History

[8:30 - 9:00]

2.1 State objective of the session clearly. Write it down on the blackboard.

----- OBJECTIVES OF THE SESSION -----

- o Identify important decisions that can be made from the history.

- 2.2 Explain that a complete history is useful and essential for making sound and appropriate decisions.
- 2.3 Ask trainees what are the decisions that can be made by the physician from the data obtained from the history? Explain that you will select some of the items in the history as example.
- 2.4 Put on the transparency showing the items and decisions to be made but show only the items related to the history.
- 2.5 Discuss items.
- 2.6 Allow maximum participation of your trainees.
- 2.7 Give immediate feedback by showing the decisions to be made.
- 2.8 Conclude:

Taking history is one of the most basic important skill that physicians should acquired. A complete accurate information on the history will help the physician to look for signs of dehydration, search for other conditions, decide on the management plan, observe carefully the child during the initial rehydration period, focus on specific points for educating the mother.

Decisions That Can Be Made From The History

ITEMS IN THE HISTORY	DECISIONS
More frequent stools and change in consistency and character.	Child has diarrhoea.
Looser stools only.	Probe more. The child may be starting diarrhoea or has false diarrhoea.
Watery stools.	Diarrhoea is present, look for signs of dehydration.
Duration : Few days only.	Look for signs of dehydration focus on nutritional education child is at high risk of malnutrition.
Duration 14 days or more.	Suspect chronic diarrhoea.
Blood in stools.	Suspect dysentery-order laboratory tests.
Foul & bulky stools.	Suspect Giardiasis-malabsorption-order laboratory tests.
Vomiting.	Give ORS, but observe carefully during initial rehydration.
Fever.	Confirm by measuring temperature. Search for other conditions.
Treatment given.	If given drugs that are not indicated, look for adverse effects (gastroic infections due to ampicillin or tetracycline-ileus).
Feeding.	If ORS given and correctly, congratulate the mother-decisions should be related to nutritional plan and health education activities.

3.1 State objectives of the session clearly. Show transparency No. 17.

----- OBJECTIVES OF THE SESSION -----

- o State uses of ORS
- o Identify cases that should be rehydrated by ORS
- o State the role of ORS administration
List indications of intravenous and nasogastric therapy at the reception area.
- o Discuss essentials of nutritional management of diarrhoeal cases.
- o List indications of drugs and realize that drugs should be given only when indicated.

3.2 Use the question and answer technique.

3.3 Explain:
Among the tasks of physicians in the reception area is to write the management plan.

3.4 Ask: What are the main components of the management plan for diarrhoeal diseases?

Answer:

Selecting the method of rehydration.
Write the nutritional plan.
Prescribing drugs whenever indicated.

3.5 Ask: What are the main uses of oral rehydration therapy?

Answer:

Prevent dehydration.
Initiate rehydration of most cases.
Complete initial rehydration after IV or nasogastric therapy.
Maintain hydration.

3.6 Ask: What are the cases that should be treated by oral rehydration?

Answer:

Oral rehydration is indicated in almost all cases of diarrhoea. As long as the child is alert and strong enough to drink, he should receive oral rehydration by cup and spoon.

3.7 Ask: How much ORS should one give?

Answer:

Generally speaking give ORS freely (ADLIBITUM) as the amount of ORS needed for rehydration can be determined by the child himself. Give ORS at an average rate of one teaspoon per minute.

3.8 Ask: In the reception area, when should you decide to give nasogastric rehydration therapy?

Answer:

- Child suffering from apparent drug intoxication, particularly antiemetics, yet not severely dehydrated.
- Child is severely dehydrated, but intravenous therapy not available.
- Child comes late at night, mother is likely to sleep and child will be less frequently observed.
(Show transparency No. 18).

3.9 Ask: In the reception area, when should you decide to give IV rehydration therapy?

Answer:

In the following:

- Shock
- Coma
- Unconscious cases
- Ileus
- Severe abdominal distension
- Children who should receive nasogastric therapy, but nasogastric rehydration could not be administered for one reason or another
(Show transparency No. 19).

3.10 Ask: What are the essentials of nutritional management?

Answer:

The foods recommended should be consistent with the child's normal eating habits. Feeding, especially breast, should be resumed on completing the initial rehydration.

 3.11 Ask: Should the management plan include drugs?

Answer:

- Drugs have a limited use in the management of diarrhoea.
- Antimicrobials are generally effective for Cholera, Shigella-dysentery, Entamoeba histolytica and Giardia lamblia.
- Antimicrobials are indicated as well when diarrhoea is accompanied by another specific infections such as pneumonia, tonsillitis, otitis media ... etc.
- No other drugs are needed.

3.12 Close the session

Summarize important points discussed

Link this session to the next

Session_4: Carrying Out The Tasks Carried Out By The Physician At The Reception Area (Intake) [9:30 - 10:45]

4.1 State objectives of the session clearly. Show transparency No. 20.

----- OBJECTIVES OF THE SESSION -----

- o Check the equipment of the reception area.
- o Take history from two assigned cases.
- o Assess two cases to identify signs of dehydration, and signs suggesting accompanying conditions.
- o Interpret findings and come to a diagnosis.
- o Write down the decisions, management plan and the standing order for the nurse.

 4.2 Explain to trainees what they will do. State clearly the following:

You (the trainees) are asked to carry out the following tasks:

- Check the equipment of the reception area
- Take history from two assigned cases*
- Assess them, write down the decisions, management plan and the standing order

 * Make sure that all cases given to trainees were screened before hand.

* Whenever possible if you find cases that are severely dehydrated or in need of nasogastric therapy make sure that your trainees have a chance to examine it.

At the end of the session you (trainees) will hand a written document of your activities.

Distribute the management sheet.

- 4.3 Assign two cases for each trainee.
- 4.4 Observe trainees using observational sheets A - C.
- 4.5 Give immediate feedback.
- 4.6 Make sure that trainees have reacted correctly to cases that need emergency resuscitation.
- 4.7 After one hour of assigning cases collect their written documents.
- 4.8 Inform trainees that the next session will be in the training room.

B R E A K

[10:45 - 11:00]

Session 5: The Role Of Drugs In Diarrhoea Management

[11:00 - 12:00]

- 5.1 State objectives of the session clearly. Show transparency No. 21.

----- OBJECTIVES OF THE SESSION -----

- o State why drugs should not be used as a routine.
- o Discuss indications of drugs in diarrhoea and the percent of cases in need of drug therapy.
- o Discuss reasons for prescribing drugs.

- 5.2 Divide your trainees into three groups.
- 5.3 Arrange the room as Figure 3 in page 8 of the Trainers' Manual - General Inductory Section.

- 5.4 Write down the topic of the discussion on the blackboard:

Inspite of the fact that there is little place for drugs in modern diarrhoea management, yet still some doctors are prescribing them as routine.

Items to be covered:

1. Why drugs are not to be used as a routine?
2. What are the indications for the use of the drugs?
3. The percent of cases in need of drugs.
4. Reasons for prescribing drugs, including attitudes of doctors and mothers towards drugs.

- 5.5 State that time allocated for this activity is 45 minutes.
- 5.6 Point out that each group will report on the outcome of the discussion.
- 5.7 Allow 45 minutes for the discussion.
- 5.8 Ask each group to state the summary of their discussion.
- 5.9 Distribute Newsletter Special Issue on Drugs.
- 5.10 Close the session.

Session 6: Closing Session

[12:00 - 1:20]

6.1 Evaluate the trainees:

- Distribute Progress Test 3 (Case Management).
- Allow one hour.
- Collect answers.
- Give immediate feedback. The answers of the test are in Section E: Answers to written tests.

6.2 Close the day:

- Ask one trainee to summarize.
- Thank trainees. Tell them that they have really worked hard. Tomorrow they will cover the tasks carried out in the dispensing and treatment area.
- Distribute Self Instruction Unit 3 titled: Monitoring the Progress of Diarrhoeal Cases during Initial Rehydration with Oral Therapy.

Day 4: _____

----- OBJECTIVES -----

- o Identify the instructions that should be given to mother when given first cup.
- o Identify the role of the nurse in dispensing and tracking the number of cups given and in instructing the mother.
- o Supervise the nurse during her dispensing activities.
- o Observe, supervise and guide mothers while giving ORS.
- o Educate mothers on:
 - How to hold their babies
 - Correct way of giving ORS
- o Monitor the progress of two cases during their initial rehydration.
- o Identify principles of educating and training mothers (content and technique).

EQUIPMENT AND SUPPLIES

1. Overhead projector
2. Transparencies Nos. 22 - 24
3. Blackboard
4. Patients and mothers
5. A doll or a pillow
6. A cup and a teaspoon
7. Management sheet
8. Observational sheets A - E
9. Progress test 4
10. Self instruction Unit 4 titled: Training and Guiding Mother to Care for their children with Diarrhoea

Evaluation:

- Outcome of discussions
- Observational tests
- Progress Test 4 (Monitoring)

Session 1: Introductory [8:00 - 8:05]

- 1.1 Open. day 4 activities.
- 1.2 Welcome trainees.
- 1.3 State objectives of day 4. Show transparency No. 22.
- 1.4 Remind trainees that today they will spend most of their time in the rehydration center rather than in training room.

Session 2: Dispensing Activities [8:05 - 8:40]

- 2.1 State the objectives of the session clearly. Show transparency No. 23.

----- OBJECTIVES OF THE SESSION -----

- o Identify the different tasks that should be carried out for dispensing and distributing ORS.
- o List items to be monitored during initial rehydration.
- o Describe correct actions to be carried out and decisions that should be taken in case of:
 - Child refusing ORS
 - Weak child
 - Sleepy child
 - Irritable child
- o Identify cases that should be referred to diarrhoeal wards for nasogastric or intravenous therapy

- 2.2. Use the question and answer technique.

- 2.3 State the title of the session.

- 2.4 Ask: What is the first thing one should do if he will start working in an area, say the dispensing area?

Answer:

Check if the area is well prepared and arranged or not.

- 2.5 Ask: Who is the person responsible for the dispensing activities?

Answer:

The nurse, however, it is the duty of the physician to supervise and train the nurse. He is the leader of the team.

 2.6 Ask: What are the different tasks that should be carried out at the dispensing area?

[Allow maximum participation]

Answer:

- Dispensing ORS, keeping track of the amount and recording number of cups actually consumed.
- Demonstrating to the mother how to hold the child and how to give ORS.
- Instruct the mother about vomiting, what to do if the child becomes sleepy.
- Point to the mother to come back for a refill and to call on the nurse or the doctor if she cannot cope.

 2.7 Ask: When should one monitor the child?

Answer:

The child should be observed continuously. However, it is important to monitor the child during: the first cup, after one hour has elapsed and then hourly.

 2.8 Ask: What are the items to be monitored during first cup?

Answer:

- Position of the child
- Acceptance of ORS
- Rate of administration of ORS
- Vomiting and fever

 2.9 Ask: How should the child be held?

Answer:

The child should be held in an upright position during the administration of ORS to facilitate swallowing and prevent choking and vomiting.

 2.10 Ask: What is the rate of administering ORS by cup and spoon?

Answer:

One teaspoon per minute on the average.

 2.11 Ask: What are the reasons behind non-acceptance of ORS?

Answer:

Among the most common reasons for non-acceptance of ORS are the following:

- Child is not dehydrated
- Child is too weak or tired
- Child is sleepy
- Child is irritable

2.12 Ask: How should one deal with a tired or weak child?

Answer:

Give ORS with a dropper, if it fails switch to nasogastric therapy.

2.13 Ask: How do we deal with a sleepy child?

Answer:

This is a sign of decreased consciousness. Wake him up and give ORS. If this fails consider nasogastric or IV according to the condition of the child.

2.14 Ask: What should one do in case of an irritable child?

Answer:

Try the plastic dropper. If this fails switch to nasogastric therapy.

2.15 Ask: What are the items to be monitored after one hour has elapsed?

Answer:

- Amount of ORS consumed
- Clinical signs
- Vomiting

2.16 Ask: What should be monitored hourly?

Answer:

- General condition (alert, irritable, shock - coma)
- Breathing (quiet, rapid and deep)
- Eyes (still sunken, normal)
- Anterior fontanelle (still depressed, normal)
- Abdomen (distended, normal)
- Extremities (colour & warmth)
- Vomitus (amount & frequency)
- Amount of ORS consumed

 2.17 Ask: When should one consider referral of cases for nasogastric rehydration therapy?

Answer:

In the following conditions:

- If vomiting continued inspite of administering frequent drops of ORS and child is not improving
- Child cannot swallow or too tired to drink
- Mother is too tired, sleepy or not willing to cooperate
- Increasing dehydration inspite of oral rehydration

 2.18 Ask: When should one consider referral of cases for intravenous rehydration therapy?

Answer:

- If child became in shock, comatose or unconscious.
- Severe abdominal distension-ileus.
- Increasing dehydration and child is starting to go into severe dehydration.

2.19 Close the session and link it to the next activity.

Session 3: Carrying Out The Tasks Of The Physician At The Reception Dispensing And Treatment Area [9:30 - 12:30]

3.1 State the objectives of the session clearly. Show transparency No. 24.

----- OBJECTIVES OF THE SESSION -----

Given two cases of diarrhoea and their mothers:

- o Take history.
 - o Assess two cases.
 - o Write down management plan, and leave standing orders.
 - o Demonstrate to the mothers how to hold the child and how to feed ORS.
 - o Monitor the progress of the case during first cup and then hourly.
 - o Deal with any problem and carry out the necessary actions.
 - o Check equipment, supplies and arrangement of the dispensing and treatment areas.
 - o Supervise the nurse.
-

- 3.2 Make sure that all cases given to trainees were screened before hand.
- 3.3 Whenever possible if during monitoring cases you spot cases having problems, make sure that trainees have a chance to observe them.
- 3.4 Explain to trainees what they will do, state clearly the following:
- You are asked to carry out the following activities:
- Take history from two specific cases, assess their condition, write down the appropriate management plan, as well as the standing orders.
 - Check equipment, supplies and arrangement of the dispensing and treatment areas.
 - Supervise the nurse.
 - Demonstrate to the two mothers how to hold the child and how to feed ORS.
 - Monitor the progress of the two assigned cases during the first cup and then hourly.
 - Deal with any problem and carry out the necessary actions.
- 3.5 Explain to the trainees that at the end of the session they will hand a written document of the activities.
Distribute the management sheet.
- 3.6 Assign two cases for each trainee.
- 3.7 Observe trainees using observational sheets A - E.
- 3.8 Give immediate feedback.
- 3.9 Make sure that trainees have reacted correctly to cases in need of referral.
- 3.10 At the end of the session collect the written document.
- 3.11 Inform trainees that the next session will be in the training room.

Session 4: Closing Session

[12:30 - 1:20]

- 4.1 Evaluate trainees:
- o Distribute Progress Test 4 (Monitoring)
 - o Allow one hour
 - o Collect answers
 - o Give immediate feedback. The answers of the test are in Section E Answers to written tests.
- 4.2 Close the day:
- o Thank trainees for their hard work.
 - o Ask them to read the Self Instruction Unit 4 titled: Training and Guiding Mothers to Care for their Children with Diarrhoea.

Day 5: _____

OBJECTIVES

- o List the six important teachable moments for educating a mother in a rehydration center.
- o State what information should a mother receive immediately after primary assessment.
- o List the content of the educational messages that should be given to individual mothers in the initial rehydration process if:
 - Child is vomiting
 - Child is very thirsty
 - Child is too small
 - Child is refusing ORS
 - Child is sleepy
- o List the content of health messages to be given at the end of the initial rehydration and describe how to carry out these activities.
- o Educate two mothers using the individual approach.
- o Carry out group discussion using the role play on signs of dehydration, nutrition during and after diarrhoea maintenance phase of rehydration, prevention of diarrhoea.
- o Identify the activities carried out by the physician in discharging cases and the tasks involved.

EQUIPMENT AND SUPPLIES

1. Overhead projector
2. Transparencies Nos. 25 - 28
3. Blackboard
4. Patients and mothers
5. Dropper-cups and spoons
6. Doll or a pillow
7. Handouts 8 - 15
8. Management sheet
9. Observational Sheets A - F
10. Progress test 5
11. Self Instruction Unit 5 titled: Discharging Diarrhoeal Cases after Initial Rehydration and following them up

Evaluation:

- Observational tests
- Progress Test 5
- Written documents submitted by the trainees

Session 1: Introductory

[8:00 - 8:05]

- 1.1 Open day 5 activities
- 1.2 Welcome trainees
- 1.3 State objectives of the day. Show transparency No. 25.

Session 2: Health Education Messages "What and How" [8:05 - 9:30]

- 2.1 State objectives of the session clearly. Show transparency No. 26.

----- OBJECTIVES OF THE SESSION -----

- o List the six important teachable moments for educating a mother in a rehydration center.
 - o Discuss educational messages that should be given immediately after primary assessment.
 - o State items that a doctor should educate mothers about during the early initial rehydration period.
 - o Role play and educate mothers how to deal with the following children:
 - Child is vomiting
 - Child is very thirsty
 - Child is too small
 - Child is refusing ORS
 - Child is sleepy
-
- 2.2. Introduce the session activities and brief the trainees using the question and answer technique.
 - 2.3 Explain to trainees that health messages should be given to mothers at a time when she is ready for it. Point out that knowledge provided for needs can possibly initiate early actions. State that among the teachable moments for educating the mother in a rehydration center are:
 - Immediately after primary assessment
 - Early in the initial rehydration
 - Towards the end of the process of initial rehydration

 2.4 Ask: What are the educational messages that should be given immediately after primary assessment?

Answer:

- The nature of the child's complaint
- Watery diarrhoea causes dehydration and it can be serious
- ORS will treat dehydration but will not stop diarrhoea
- Give ORS as long as diarrhoea continues

 2.5 Ask: What messages should be given before the mother starts giving ORS?

Answer:

- How to hold the child
- How to give ORS
- Call for support if you have a problem
- Come back and refill the cup

 2.6 Ask: What are items that a doctor should educate mothers about during the early initial rehydration period?

Answer:

What to do if the child is:

- Vomiting
- Small
- Refusing ORS
- Sleepy

2.7 Explain to trainees that now they will educate mothers facing problems.

2.8 Use the role play technique.

2.9 Arrange the training room as in Figure 3 in Section 1 of the Trainers' Manual/General Introductory Section. Role players should be placed in front of the group.

2.10 Distribute the "General Briefing Document" Handout B. It will be used in all the role play exercises of the session.

"This is the treatment area in the rehydration center. Mothers are all sitting and administering ORS. Two doctors and one nurse are present in the treatment area"

2.11 Carry out the first exercise:

- o Ask one trainee to volunteer to play the role of the physician
- o Give him/her the briefing document for the exercise (Handout 9-a) and ask him/her to go out of the room.
- o Ask another trainee to volunteer to play the role of the mother.
- o Give him/her the briefing document for exercise 1 (Handout 9-b), let him/her go out of the room to think of her role.
- o Read the two roles loudly so the rest of the trainees know the roles.
- o Ask them to observe the role play using the observational sheet exercise (Handout 9-c).
- o Do the enactment.
- o Conduct the debriefing and post-enactment discussion.
 - First ask the person who played the role of the doctor to express his/her feelings. Let the person express the difficulties he/she was facing in educating the woman.
 - Let the person who played the role of the mother express his/her feelings. Did the doctor clearly state why the child had the problem? Did he show her how? Was she able to understand? What was his attitude towards her and the child? Does she feel now that she is capable of dealing with the problem?
 - Ask observers about their reactions and feelings about the role play: The communication skills and the training skills of the doctor. Was his training successful or not. What was the attitude of the mother and the doctor towards the problem? What was the attitude of the doctor towards his task?
 - Ask trainees what different things they have learned through this role play.
 - How to deal with vomiting.
 - The educational method and ways of communicating with the mother.
 - Attitudes of doctors and mothers that should be considered.

2.12 Carry out the second exercise:

- Distribute Handouts 10-a, 10-b & 10-c.
- Summarize the important points.

2.13 Carry out the third exercise following the same steps. Distribute Handouts 11-a, 11-b & 11-c.

2.14 Carry out the fourth exercise following the same steps. Distribute Handouts 12-a, 12-b & 12-c.

2.15 Carry out the fifth exercise following the same steps. Distribute Handouts 13-a, 13-b & 13-c.

[Every time you have to use different trainees]

Session 3: The Process Of Mixing ORS Demonstration

[9:30 - 10:00]

- 3.1 State the objectives of the session clearly. Write them on the blackboard.

----- OBJECTIVES OF THE SESSION -----

- o Identify steps to be carried out to mix ORS.
- o Mix ORS, and criticise the process of mixing ORS using check list

-
- 3.2 Check that all materials and equipment needed for the demonstration are placed on the table.
- 3.3 Explain the goals of the demonstration at the beginning of the demonstration.
- 3.4 Give your presentation:
- Explain verbally each step of the mixing process before you carry it out.
 - Present the process one step at a time.
 - Allow the trainees to try out the skill.
- 3.5 Emphasise important points.
- 3.6 Divide the trainees into three groups.
- 3.7 Arrange the training room as in Figure 3 in Traniarés' Manual - General Introductory Section.
- 3.8 Ask each group to choose one person to carry out the demonstration.
- 3.9 Ask the rest of the group members to be critical observers.
- 3.10 Distribute the Demonstration Checklist Handout 14.
- 3.11 Let the groups start their activities.
- 3.12 Observe critically.
- 3.13 Hold a general discussion on the demonstrations carried out.
- 3.14 Close the session and thank the trainees. Tell them that the next session will be in the rehydration center.

B R E A K

[10:00 - 10:30]

Session 4: Practical Diarrhoea Management [10:30 - 12:00]

4.1 State the objectives of the session clearly. Show transparency No. 27.

----- OBJECTIVES OF THE SESSION -----

- o Given two cases and their mothers, the trainees will:
 - Take complete history from two mothers.
 - Assess, write the management plan and standing orders.
 - Give immediate health education messages to the mothers immediately after primary assessment is carried.
 - Monitor the progress of two children during the initial rehydration.
 - Give individual advice to the two mothers.
 - Demonstrate how to mix ORS of each mother.
 - o Using checklist the trainee will:
 - Check equipment and supplies of the education and demonstration area.
 - Report on items that should be present and ways to improve the arrangement of the center for education and training.
-
- 4.2 Explain clearly what are the tasks to be carried out by the trainees.
 - 4.3 Explain that each trainee will submit a written document about what he has achieved, and a report on the arrangement of the center for education. Distribute the management sheet.
 - 4.4 Assign for each trainee two cases that have been previously screened.
 - 4.5 Observe trainees during their activities using observational sheets A - F.
 - 4.6 Give immediate feedback.
 - 4.7 At the end of the session collect the written documents "Management sheets and reports."
 - 4.8 Close the session. Thank trainees and tell them that the next session will be in the training room.

Session 5: Educating Mothers Using The Group Approach Role Playing
[12:00 - 1:00]

5.1 State the objectives of the session clearly. Show transparency No. 28.

----- OBJECTIVES OF THE SESSION -----

- o Identify the steps for carrying a group discussion
- o Role play and carry out a group discussion
- o Criticise the group discussion carried out

5.2 Explain to participants that they have already read the content of the health education to be given at the end of the rehydration. They also learned the essentials and steps for carrying a group discussion.

5.3 Show the steps on the blackboard as follows:

- Start with general knowledge
- Ask questions but never use leading questions
- Find out the opinion of other mothers
- Give immediate feedback
- Have a summary

5.4 Explain that they have been given examples of questions to be used.

5.5 Tell them that they will be now practicing the skill of carrying and criticising health education using the group discussion method

5.6 Carry out the first role play:

- o Ask one trainee to act as the doctor who will educate five mothers. He will use the group discussion method. The subject of the discussion is the "Signs of Dehydration".
- o Select five persons to play the role of mothers. Choose two persons and tell them separately that they have to play the role of mothers who do not know. Ask the third to be passive. The fourth to try to answer most of the questions. The last should play the role of a mother who thinks that she should not answer except when requested. But usually she knows the answers. These roles should not be told to the person who will play the role of the physician.
- o Ask the rest to observe the discussion, using an observational sheet (Handout 15).
- o Do the enactment
- o Conduct the debriefing and post enactment discussion in the usual way.
- o Summarize the important points.

- 5.7 Carry out the second group discussion on "Nutrition" following the same steps.
- 5.8 Carry out the third group discussion on "Maintenance of Rehydration" following the same steps.
- 5.9 Carry out the fourth group discussion on "Prevention of Diarrhoea" following the same steps.

[Each time you have to use different trainees]

- 5.10 Summarize the main points.

Session 6: Closing Session

[1:00 - 1:50]

- 6.1 Evaluate your trainees:
 - o Distribute Progress Test 5
 - o Allow 45 minutes
 - o Collect answers
 - o Give immediate feedback. The answers of the test are in:
Section E: Answers to written tests.
- 6.2 Close the day:
 - o Thank trainees
 - o Ask them to read the Self Instruction Unit 5 titled:
Discharging Diarrhoeal Cases after Initial Rehydration and
Following them up.

Day 6: _____

 OBJECTIVES

- o Identify the important items to look for in carrying an exit examination.
- o Identify the data to be registered and recorded and how to fill the register book.
- o Criticise a sample of recorded data.
- o Realise the uses of the record and its importance.
- o State criteria for good storage of ORS.
- o Given several packets of ORS, identify those who are good.
- o Carry out the following:
 - An exit examination
 - An exit interview
 - Make referral whenever indicated
 - Check equipment and supplies
 - Check storage area in the rehydration center and assess the standard of storage
 - Criticise the recorded data

 EQUIPMENT AND SUPPLIES

1. Overhead projector
2. Transparencies Nos. 29 - 33
3. Blackboard
4. Patients and mothers
5. Doll or a pillow
6. Sample of records
7. Register book
8. Sample of good and spoilt packages
9. Cups and spoons
10. Handouts 16 - 20
11. Observational sheets G&H
12. Post test

Evaluation:

- Observational tests
- Outcome of discussion and exercises
- Final Post Test

Session 1: Introductory

[8:00 - 8:05]

- 1.1 Open day 6 activities
- 1.2 Welcome trainees
- 1.3 State the objectives of the day. Show transparency No. 29.

Session 2: Exit Interview

[8:05 - 9:30]

- 2.1 State the objectives of the session clearly. Show transparency No. 30.

----- OBJECTIVES OF SESSION -----

- o Identify items to be carried in the exit interview.
- o Role play an exit interview.
- o Criticise a role play on exit interview.

- 2.2 Explain to trainees that they will carry out a role play exercise
- 2.3 Open the session by explaining to the trainees that they have already learned that an exit interview is a discussion between the doctor and the mother just before discharging the patient. Depending on this discussion, the physician should provide additional information and education accordingly.
- 2.4 State that at the point of discharge screen mothers knowledge and attitudes on the following subjects:
 - ORS and their role in treating dehydration
 - Mixing ORS
 - Maintenance of hydration
 - Signs of dehydration
 - Nutrition therapy
 - Prevention of diarrhoea
- 2.5 Write these points clearly on the blackboard
- 2.6 Explain to the trainees that they already learned the principles of communicating with mothers.
- 2.7 Tell trainees that they will now carry out a single role play to demonstrate an exit interview. Distribute Handout 17-a.

- 2.8 Write down the following:
- This is the rehydration center. Zeinab came early in the morning with her child who was moderately dehydrated. Now her son Ali looks much better. The nurse told her that he is ready for discharge. Zeinab has to go and have her son be examined by the doctor.
- 2.9 Ask one of the trainees to play the role of the physician. Give him/her the briefing document for his/her role (Handout 17-b). Ask the person selected to read document outside the room.
- 2.10 Select another trainee to play the role of Zeinab. Read the role to all trainees. Give her/him the briefing document (Handout 17-c). Ask the person to read it and be ready to step into the role.
- 2.11 Tell trainees that they will be observed and they will criticise the role play using the observational sheet.
- 2.12 Distribute the observational sheet (Handout 16).
- 2.13 Do the enactment.
- 2.14 Conduct the debriefing and post-enactment discussion:
- First ask the person who plays the role of the doctor to express his/her feelings. Let the person express the difficulties he was facing in educating the woman, particularly in the issue of teething and diarrhoea as well as measles vaccination.
 - Let the person who played the role of the mother express her/his feelings. Was the doctor able to convince her about the importance of measles vaccination? Did he explain that teething is not related to diarrhoea and that diarrhoea could be transmitted from one person to another?
 - Ask the observers about their reactions and feelings.
 - Ask trainees what different things they have learned through this exercise.
- 2.15 Summarize the important points.
- 2.16 Carry out a multiple role play exercise:
- Divide your trainees into groups of threes.
 - Arrange the training room as in Figure 4 in page 8 in the Trainers' Manual - General Introductory Section.
 - Assign roles.
 - Distribute the briefing documents (Handout 1B) and observational sheet (Handout 16).
 - Do the enactment.
 - Conduct the debriefing and post-enactment discussion.
 - Summarize the important points.
- 2.17 Close the session. Thank trainees.

Session 3: Records

[9:30 - 10:45]

3.1 State objectives of the session clearly. Show transparency No. 31.

----- OBJECTIVES OF THE SESSION -----

- o Identify the data that should be recorded in a register book.
- o Realise the importance and uses of the data recorded.
- o Identify how to fill the register forms.
- o Criticise a sample of recorded forms

3.2 Open the session by stating a treatment register should always be kept in the center. It is the duty of the physician to ensure that a complete and accurate information are being entered in this book.

3.3 Ask: What are the data that should be recorded?

Answer:

The data to be recorded should include the following:

- The child's name, age, sex and residency
- The illness (signs and symptoms & duration)
- Case diagnosis (degree of dehydration, feeding, pattern ... etc.)
- Management of case (treatment prescribed, length of stay in unit ... etc.)
- Outcome of the case (improved, referred to hospital ... etc.)

3.4 Ask: What is the importance of this register?

Answer:

It is useful for:

- Case management: You can check information and consult the treatment register during monitoring and when discharging the patient.
- It is permanent record for all patient visits, diagnosis made and treatment prescribed and provided in the center.
- It is used as a tool for supervision. It should be used to evaluate case management at each center and staff performance.
- The data collected is useful for disease surveillance i.e. follow changes in severity of dehydration.
- It could be used as well to evaluate programme management to replace the strategies

- 3.5 Distribute Handout 19 that include blank pages of the registration forms.
- 3.6 Explain that the first page of every register book is a useful reference. It tells you how to fill the record and the codes to be used.
- 3.7 Emphasise that the columns are narrow and do not have room for a lot of information. So, you should use the codes, so that the data will be clear and easy to read.
- 3.8 Tell trainees that there are two copies of each page of the registration form: one of them is a carbon copy. The copy is a form that is sent to the NCCDP headquarters at the end of each month. It is used as a monitoring tool.
- 3.9 Ask trainees to study the registration forms and the copy of the first page of registration book.
- 3.10 Explain to trainees that they will now criticise recorded data.
- 3.11 Distribute Exercise (Handout 20).
- 3.12 Ask trainees to work in pairs and write down their comments on each case recorded.
- 3.13 Have a general discussion.
- 3.14 Give immediate feedback. Make sure that their answers include the following:

Case 1:

The recorded data on history, diagnosis and management of dehydration are logic and correct. The recorded temperature goes with the clinical findings. The case was properly referred for intravenous. Follow up of the case was attempted but the outcome of the following up was not successful.

Case 2:

According to the recorded data this case should be suffering from moderate dehydration and not mild. The child was treated for one hour which is not enough. Initial rehydration could not be accomplished for moderate dehydrated children by one cup. The child as well did not gain in weight. The child could not possible be rated as improved.

This child is not a new comer. This is a follow up visit. The case number, and the page number of the Register Book in which the initial visit was recorded should have been stated under the column notes.

Case 3:

According to the recorded signs of dehydration this child is suffering from mild dehydration and not of moderate dehydration. The child was fed in two hours 1000 cc of ORS (5 x 200). This means that the rate of ORS was too rapid or the recorded data was wrong. The mother was given more packages than necessary. This child is only having breast feeding and fluids.

According to his age he should have been receiving weaning foods.

Case 4:

Data recorded is incomplete. The temperature was not recorded, or the complaint or the degree of dehydration. The weight of the child was recorded at reception only. Nothing was recorded about the treatment given only that the child was referred to hospital. No follow up of the case was done.

Case 5:

The feeding pattern recorded is not appropriate to the child as recorded. The child received one cup of ORS which is not enough to initiate rehydration for a child weighing 12 kgms. ($12 \times 5 = 600$). Thus the child did not gain in weight. In spite of this the record states that the child has improved. How?

3.15 Close the session and thank the trainees.

Session 4: Storage Of ORS

[10:45 - 11:00]

4.1 State your objectives clearly. Write the objectives on the blackboard.

----- OBJECTIVES OF THE SESSION -----

- o Given several packets of ORS, trainees identify those that denote poor storage.
 - o List the criteria for good storage of ORS.
-

4.2 Display packets of ORS. Some of these packets should not be upto the standards.

4.3 Let trainees study the packets. Let them comment about the packets one by one on a piece of paper.

- 4.4 Ask one participant to read his comments on each packet.
- 4.5 Have immediate feedback from the rest.
- 4.6 Give immediate feedback.
- 4.7 Explain to trainees that ORS need proper storage. ORS could be spoiled by humidity, temperature and also by sharp instruments.
- 4.8 Tell trainees that there are general guidelines for storing ORS that are recommended not only by the project but also by WHO.
- 4.9 Show the following: (Transparency No. 32).

----- GUIDELINES FOR STORING ORS -----

- o Temperature should not exceed 30 °C ORS may melt or turn brown if stored a long time above 30 °C.
- o Humidity should not exceed 80%, ORS is likely to cake if stored a long time in higher humidities.
- o Storage areas should be clear of all types of insects and rodents.
- o Cartons of ORS should be put on shelves or boards that are raised from the floor by blocks.
- o Cartons of ORS should be arranged to allow "First in, First out".
- o Cartons should be arranged so that sharp objectives will not make holes in the packets.
- o ORS should be kept always inside the cartons.

- 4.10 Summarize the main points and then close the session. Emphasise that next session will be in the rehydration center.

Session 5: Discharging Patients

[11:00 -- 12:20]

- 5.1 State clearly the objectives of the session. Show transparency No. 33.

----- OBJECTIVES OF THE SESSION -----

- o Given one case and a mother, examine the case and carry out an exit interview.
- o Given a checklist, check the equipment and supplies prepared for discharging patients.
- o Check storage of ORS using the guidelines for storing ORS.
- o Criticise the register book.

- 5.2 Divide trainees into 2 groups.

5.3 Explain clearly the tasks to be carried out by each group.

Group A:

- Check equipment and supplies prepared for the discharge areas
- Criticise the register book
- Check storage of ORS
- Write down a report on his finding

Group B:

- Examine one case and carry out an exit interview
- Write down referrals if the case need this activity.

5.4 Tell trainees that each group is allowed 25 minutes. They should carry these tasks individually. Once they have done it they have to exchange their tasks.

5.5 Distribute check lists.

5.6 Assign cases for trainee who will carry exit examination and interview (use observational sheets I - J to observe their performance and give immediate feedback).

5.7 Collect reports written.

5.8 Carry out a short discussion on the performance and findings of trainees.

5.9 Close the session and ask trainees to go to the training room for the last session.

Session 6: Closing Session

[12:20 - 2:00]

6.1 Evaluate trainees:

- o Give the final test
- o Give immediate feedback

6.2 Close the course:

- o Thank trainees for hard work they have done
- o Explain that: you expect that the skills learned will be used in their daily activities. Moreover you hope that they will also train members in their team.