

**ANSWER SHEETS
FOR
SUPERVISORY SKILLS**



Revised 1990

COMMUNITY INVOLVEMENT

ANSWER SHEETS

COMMUNITY INVOLVEMENT
Possible Answer to Exercise A

Based on the information included with the map, the access definition should be similar to the following:

- Anyone living within 10 km. of the health centre.
- Anyone living within 5 km. of the railway station near Zubin.*
- Anyone living in a village with a community health worker.

The access definition need not match this exactly (for example, it could simply say that anyone who can reach the health centre in 1 hour or who lives in a village with a community health worker has access).

Based on the access definition above, the number of people with access to health services would be 15,230:

Villages with access

Ayala (3,000)	
Suze (600)	Within 10 km. of health centre
Matos (1,500)	
Bono (2,000)	
Morue (1,500)	
Zapa (3,500)	Has community health worker
Zubin (2,000)	Within 5 km of railway station
Eno (1,000)	

130 people not in villages live either within 10 km of the health centre or within 5 km of the railway station.

Subtracting the number of people with access from the total population of the health area leaves 2,170 who do not have access to health services.

* If it takes a person about 1 hour to travel 10 km, then he could travel 5 km in 1/2 hour. If the train trip to Ayala from the Zubin station takes 15 minutes, a person could travel 5 km to the station and take the train into Ayala all in 45 minutes. Since the trains usually run on schedule, the trip could be planned so that there would be a minimum of waiting at the station, and the health centre could be reached in about an hour.

COMMUNITY INVOLVEMENT
Possible Answer to Exercise B

There can be many correct answers for this exercise. The statement will be in your own words, but should contain these points:

"Diarrhoea, gastroenteritis, and dysentery together seem to be the most serious health problem in the area. More people visit the health centre and the 2 community health workers for these than for any other reasons. All of the health providers who do not keep written records and many women in the community mention diarrhoea as a major problem.

"Second in importance seems to be fever and malaria, which are combined because malaria is often recorded as fever.

"Respiratory infection and cough, also considered together, are the problems that are reported third most frequently by the health centre and community health workers. The traditional healer also sees many people with respiratory problems. Many mothers said that cough in children is a major problem.

"Measles is reported less often than these other problems. Only 25% of children are immunized against measles, and it has the potential to be a serious problem if immunization is stopped.

"Many women want a female health worker to provide family planning services at the health centre."

**MANAGEMENT OF THE
PATIENT WITH DIARRHOEA**

ANSWER SHEETS

(REVISED 1990)

MANAGEMENT OF THE PATIENT WITH DIARRHOEA
Answers to Exercise B

2. Your assessment table for Pano should look like this:

	A	B	C
1. LOOK AT: CONDITION	Well, alert	• Restless, irritable •	• Lethargic or unconscious; floppy •
EYES	Normal	Sunken	Very sunken and dry
TEARS	Present	Absent	Absent
MOUTH and TONGUE	Moist	Dry	Very dry
THIRST	Drinks normally, not thirsty	• Thirsty, drinks eagerly •	• Drinks poorly or not able to drink •
2. FEEL: SKIN PINCH	Goes back quickly	• Goes back slowly •	• Goes back very slowly •
3. DECIDE:	The patient has NO SIGNS OF DEHYDRATION	If the patient has two or more signs including at least one * sign *, there is SOME DEHYDRATION	If the patient has two or more signs, including at least one * sign *, there is SEVERE DEHYDRATION
4. TREAT:	Use Treatment Plan A	Weigh the patient, if possible, and use Treatment Plan B	Weigh the patient and use Treatment Plan C URGENTLY

3. (a) Pano has some dehydration.
 (b) You would select Treatment Plan B.
4. Yes, Pano has a fever of 39°C.

MANAGEMENT OF THE PATIENT WITH DIARRHOEA
Answers to Exercise C

Here are possible answers to go with each of the pictures:

Picture 1. Sunken eyes.

Picture 2. Skin does not go back quickly when pinched.

Picture 3. Drinking eagerly.

Picture 4. Severe undernutrition. Sunken eyes. Floppy. (The latter 2 signs may be due to the severe undernutrition rather than to dehydration.)

Picture 5. Sunken eyes.

MANAGEMENT OF THE PATIENT WITH DIARRHOEA
Answers to Exercise E

Case 1

- a. Yes. Sione has the following signs of dehydration:
- eyes that are a little sunken
 - a skin pinch which goes back slowly
 - very dry mouth and tongue
 - drinks eagerly
- b. No. Sione is not severely dehydrated.
- c. Sione has some dehydration. The health worker should select and follow Plan B - To Treat Dehydration.
- d. Sione should be given 400 - 600 ml of ORS solution in the first 4 hours. His mother should breast-feed him as well.
- e. If Sione vomits, his mother should stop giving ORS solution for 10 minutes. Then she should start giving it again, but more slowly, a teaspoonful every 2 - 3 minutes.
- f. The child should be reassessed after 4 hours.
- g. Since 2 of the signs of dehydration are still present, including 1 key sign, Plan B will still be followed. Sione should be given 400 - 600 ml of ORS solution for another 4 hours. He should be breast-fed between the times he is receiving ORS solution. This procedure should be repeated until the signs of dehydration have gone. He should be breast-fed frequently.
- h. Plan A should be selected because there are no longer signs of dehydration, and the health worker wants to ensure that further dehydration is prevented.

Case 2

- a. Ana has only one sign of dehydration. She is more thirsty than normal.
- b. The health worker should select and follow Plan A to prevent dehydration.
- c. Ana has a fever of 38°. If there is malaria in the area, Ana should be given an antimalarial.
- d. The child should be given 100 - 200 ml of ORS solution after each diarrhoea stool.

MANAGEMENT OF THE PATIENT WITH DIARRHOEA
Answers to Exercise E, continued

- e. Give increased amounts of a recommended home fluid such as _____ . If a recommended home fluid is not available, give extra water. Offer Ana food at least 6 times a day. Give _____ (a cereal or other starchy food) mixed with _____ (local foods) . Add 1 or 2 teaspoons of vegetable oil to each serving. Give fresh, cooked foods. Mash or grind well. Give fresh fruit juice or bananas for potassium. Continue these foods after the diarrhoea stops, and give an extra meal each day for 2 weeks.
- f. Give Ana more fluids than usual and continue to feed her as described above. Bring the child to a health worker if she does not get better in 3 days, or if she: passes many watery stools, vomits repeatedly, is very thirsty, has a fever, eats or drinks poorly, or has blood in the stool.

Case 3

- a. Dano has the following signs of dehydration:
- * lethargic and floppy
 - * skin pinch goes back slowly
 - * dry eyes (no tears)
 - * very sunken eyes
 - * very dry mouth
 - * drinks poorly
- b. There is severe dehydration.
- c. Dano has a fever of 40°C. The health worker should give paracetamol. If there is falciparum malaria in the area, he should also give an antimalarial or follow the directions of the national malaria control programme.
- d. The health worker should prepare ORS solution for his mother to begin giving while taking Dano to the health centre. The solution should be given frequently in small amounts, such as a spoonful every 1 - 2 minutes.
- e. The child should be given 180 ml (30 x 6) of IV fluid the first hour.
The child should be given 420 ml (70 x 6) of IV fluid during the next 5 hours.
- f. Give 30 ml (5 x 6) ORS solution per hour by mouth in addition to continuing IV therapy.
- g. Plan A should be followed. However, as instructed in the notes at the bottom of Plan C, the health worker should observe Dano for at least 6 hours to make sure hydration is maintained by giving ORS solution according to Plan A.

MANAGEMENT OF THE PATIENT WITH DIARRHOEA
Answers to Exercise E, continued

Case 4

- a. Lati should be given an antibiotic for the dysentery. Trimethoprim (TMP) - Sulfamethoxazole (SMX) is the antibiotic of choice. The dose would be TMP 35 mg and SMX 175 mg, 2 times a day for 5 days.
- b. Lati must be sent to the hospital for management because she is severely undernourished. The health worker should give the mother some ORS solution and show her how to give 35 ml/hr during the trip.

MANAGEMENT OF THE PATIENT WITH DIARRHOEA
Possible Answers to Exercise G

EXAMPLE

INDIVIDUAL PATIENT RECORD

Patient Name: Sione Kusmeiani Date of Birth: March 17, 1990

Address: 6 MALUKO ROAD Sex: Male
 Female

Distance from patient's home to health centre: 3 km

Other information:

VISITS TO HEALTH CENTRE:

Date	Reason for Visit	Diagnosis	Service or Treatment
5/24/90	Immunizations	—	DPT-1 Polio
8/10/90	Diarrhoea	Diarrhoea with some dehydration	Treated dehydration with ORS. Gave 2 packets to mother.

EXAMPLE

Community Health Worker Register

DATE	NAME	AGE	REASON FOR VISIT	TREATMENT OR SERVICE
8/18/90	Nova Helou	14	Broken leg	Set leg.
8/18/90	Sione Kusmeiani	5mo.	Diarrhoea	ORS treatment for dehydration
8/10/90	Keri Dringpa	1	Infected ear	prescribed antibiotic
8/10/90	an Dite	47	ex	Ca...

PREVENTION OF DIARRHOEA

ANSWER SHEETS

SUMMARY OF PREVENTIVE PRACTICES

BREASTFEEDING

For the first 4-6 months of life, infants should be exclusively breastfed. "Exclusively breastfed" means the baby should receive breastmilk and no other fluids such as water, juice, or milk formula.

An infant who is exclusively breastfed will have less diarrhoea than a partially breastfed or bottle-fed infant because

- 1) breastfeeding avoids use of contaminated bottles, teats, and formula
- 2) content of breastmilk helps baby's body build resistance to disease.

To breastfeed comfortably and safely, mothers should

- 1) start breastfeeding as soon as possible after delivery
- 2) give no extra fluids, such as water, sugar water, or milk formula, especially in the first days of life
- 3) breastfeed on demand
- 4) if it is not possible to take the baby to work, breastfeed before leaving home, on returning, at night, and at any other time when with the baby
- 5) express milk manually to avoid engorgement when separated from baby

PREVENTION OF DIARRHOEA
Possible Answers to Exercise A
Continued

WEANING

When should weaning begin? 4-6 months of age

What foods are good weaning foods? soft, mashed foods such as beans or peas, milk products, eggs, meat, fruit and green vegetables

Weaning foods should be prepared with care. Family members should

- 1) wash hands before preparing the food and before feeding baby
- 2) prepare food in clean place
- 3) wash uncooked food in clean water before feeding
- 4) cook or boil food well when preparing
- 5) prepare food immediately before it will be eaten
- 6) cover foods which are being kept, and keep in a cool place
- 7) if cooked food is prepared more than 2 hours in advance, heat to boil before giving to baby
- 8) feed baby with clean spoon

USE OF PLENTY OF CLEAN WATER

To collect water and store it safely in the home, families should

- 1) collect it from the cleanest available water source
- 2) collect and store water in clean containers
- 3) empty and rinse out containers daily
- 4) keep storage containers covered
- 5) not let children or animals drink from storage containers
- 6) obtain water with long-handled dipper

HANDWASHING

Good handwashing means use of soap and plenty of water, and careful cleaning of all parts of hands

PREVENTION OF DIARRHOEA
Possible Answers to Exercise A
Continued

When telling a young mother about handwashing, you would tell her that the important times to wash her hands are

- 1) after cleaning a child who has defecated and disposing of stool
- 2) after defecating
- 3) before preparing food
- 4) before eating
- 5) before feeding a child

USE OF LATRINES

Every family should have a latrine and (who?) all family members should use it.

Where there is no latrine, people should defecate (where?) at least 10 metres from water supply, away from house, path, or where children play.

PROPER DISPOSAL OF BABIES' STOOLS

Key points about safely disposing of a baby's stool are

- 1) dispose of the stool quickly
- 2) dispose of the stool in a latrine, or wrap in leaf or paper and bury.

MEASLES IMMUNIZATION

Every child should be immunized against measles at the age of 9 months or as soon after as possible.

PREVENTION OF DIARRHOEA
Answers to Exercise C

Water Source #1:

The water source is not clean because

- it is not protected from surface water runoff
- domestic animals drink from it
- people bathe in it
- people defecate within 10 metres of it
- latrines are located uphill from it.

The water source is convenient because it is located within easy access of the village people. However, it is available only in the wet season. During the dry season, people must walk long distances to collect water from another source.

Water Source #2:

The water source is clean because the rain is clean when it is collected. To keep it clean, the water in the containers must be protected from contamination.

The water source is convenient because people can collect the water at their homes. However, it is available only in the wet season.

Water Source #3:

The water source is not clean because

- it is protected by only a low parapet
- rainwater and spilled water can soak back into it
- people standing on the edge can kick mud into it
- children throw rubbish down it
- animals wallow (and most probably defecate) in the mud around it.

The water source is convenient because it is located in the centre of the village within easy access to the village population. But, it is hard work to raise the water in a bucket with ropes.

Water Source #4:

The water source is not clean because animals share the water.

The water source is not convenient because it is located so far from the village and water must be carried a long distance.

WORKSHEET FOR SELECTING PREVENTIVE PRACTICES TO EMPHASIZE

PREVENTION OF DIARRHOEA
Possible Answers to Exercise D

Possible PRACTICES TO BE CHANGED	Place a ✓ by the MORE IMPORTANT PRACTICES ¹	Place a ✓ by the MORE FEASIBLE TO CHANGE ²	Place a * by the PRACTICES TO EMPHASIZE
1) Breastfeed exclusively for 3 months.	✓	✓	*
2) Give more nutritious weaning foods.	✓	✓	
3) Wash hands, using soap.	✓	✓	
4) Properly dispose of children's stools.	✓	✓	*
5) Build and properly use a latrine.	✓	✓	
6)			
7)			
8)			
9)			
10)			
11)			
12)			

Rationale: The supervisor is not sure of health workers' ability to convince community members to change their behaviours, especially if it is a practice they have never accepted. He feels more likely to succeed if the practice was once accepted, such as breastfeeding in this community. He will give high priority to any practice the government supports and for which it provides resources.

- 1 To decide relative IMPORTANCE of a practice, consider government plans, expected effect or a change on disease rates, and number of people that would be affected.
- 2 To decide FEASIBILITY, consider community interest and resources, and health worker capability.

PREVENTION OF DIARRHOEA
Possible Answers to Exercise G

Possible Improvements

WATER SOURCE #1:

- Try to arrange an alternative watering hole for animals or at least make a special place for animals to drink at the down-stream or lower end of the pond.
- Dig a drainage ditch at the upstream end to divert surface water runoff.
- Discourage washing in the pond.
- Discourage defecation near the pond and teach people, especially children, that urination in the pond water is harmful. (Note: Link this to some traditional belief or say that if you urinate underwater, nasty things will swim up your urethra.)
- Move latrines downhill from the pond.
- Dig a well or wells a few metres from the side of the pond. Use this water for domestic purposes. (Note: The well water will be much cleaner than the pond water and will be available for a longer period in the dry season.)

WATER SOURCE #2:

- In the rainy season, this system may work well and no improvements are urgently needed. However, people may appreciate advice and assistance in improving the guttering and collection arrangements and in providing larger and more hygienic storage containers. The community could act together to purchase guttering or large containers in bulk at a reduced price or in training a tradesman to install improved water catchment systems.
- In the dry season, this water source will not exist. It will be necessary to carefully consider the adequacy of the alternative dry season source. Typically, communities which use rainwater in the rainy season have very poor (either polluted and/or distant) water sources in the dry season.

PREVENTION OF DIARRHOEA
Possible Answers to Exercise G
Continued

WATER SOURCE #3:

- Install a simple pulley device to make it easier to raise water.
- Line the upper section of the well to prevent it from collapsing or subsiding.
- Build a wall or parapet at the top of the well behind which people stand to draw water.
- Do not allow children to play in or around the well.
- Build a drainage ditch around the well to divert storm water and allow spilt water to run away.
- Build a fence with a gate to keep animals away.

WATER SOURCE #4:

This is a hopeless situation. It is not worth improving because it is so far from the village. A new source is required near the village; perhaps a hand-dug well or a borehole fitted with a handpump. The Ministry of Water, or another appropriate agency, should be contacted and asked for assistance.

TARGETS

ANSWER SHEETS

TARGETS
Answers to Exercise A

TARGET WORKSHEET - PART 1

A. ESTIMATE CURRENT ACCESS TO THE SERVICE.

A-1 20,000

A-2 $20,000 \times 0.15 = 3,000$

B. ESTIMATE THE NUMBER OF USES OF THE SERVICE IN THE PAST 12 MONTHS.

600 (450 + 85 + 65 = 600 visits, which the supervisor decided to count as new episodes treated)

C. ESTIMATE POTENTIAL USE OF THE SERVICE.

$3,000 \times 3 = 9,000$

D. CALCULATE A USE RATE FOR THE PAST 12 MONTHS.

$600 \div 9,000 = 0.07$

TARGETS

Possible Answers to Exercise B

2a) Possible ways that more people could be given access to health services in Bornu Health Area:

- * Establish a new health facility.
- * Employ a new community health worker at Molaka and Zola.
- * Train traditional birth attendants or other traditional healers to give some services (such as OR therapy).
- * Begin outreach services.
- * Build or improve roads so it will be easier for people in Molaka and Zola and people north of Arabu to reach the health centre.
- * Build a bridge between Bornu and Prambas.

3a) Possible ways to increase use of health services in Bornu Health Area:

- * Promote health services that will be offered at the health centre.
- * Provide health education on why services are helpful.
- * Inform people of what services are offered and when and why they are offered.
- * Improve the technical quality of services. (For example, provide therapy with ORS instead of Kaolin.)
- * If services cost money, reduce the cost.
- * Improve transportation.
- * Make the services easier to use. (For example, increase health centre hours; decrease waiting time.)
- * Make the services more pleasant to use. (For example, provide an attractive waiting area; improve the manners of staff.)
- * If there are groups with access who are not using services, try to find out why. Then make improvements that would encourage them to use the services. (For example, hire workers belonging to ethnic or social groups which will not otherwise use the service; develop special promotional materials for those groups.)

TARGETS
Answers to Exercise C

TARGET WORKSHEET - PART 2

A. ESTIMATE ACCESS TO THE SERVICE IN THE COMING YEAR.

A-1 $20,000 + 3,000 - 0 = 23,000$

A-2 $23,000 \times 0.15 = 3,450$

B. ESTIMATE POTENTIAL USE IN THE COMING YEAR.

B-1 $3,450 \times 3 = 10,350$

C. ESTIMATE EXPECTED USE IN THE COMING YEAR.

C-1 $10,350 \times 0.07 = 725$

C-2 Use will increase to 1,450

D. SET USE TARGET FOR THE TARGET POPULATION WITH ACCESS.

D-1 $1,450 \div 10,350 = 0.14$

E. SET USE TARGET FOR THE ENTIRE HEALTH AREA.

E-1 $25,000 \times 0.15 = 3,750$

E-3 $3,750 \times 3 = 11,250$

E-5 $1,450 \div 11,250 = 0.13$

WHAT DO THE TARGETS MEAN?

In Bornu Health Area, 14% of the diarrhoea episodes in children under age 5 with access will be treated by health workers.

13% of the diarrhoea episodes in all children under age 5 in the health area will be treated by health workers.

The "Targets and Achievements" form should be completed as shown on the next page.

TARGETS AND ACHIEVEMENTS

TARGETS ANSWERS TO EXERCISE C Continued

Health Area: Bornu Year of Report: From January 1987 Through December 1987
 (month)(year) (month)(year)

Types of Health Facilities and Health Workers in Health Area (Indicate Number of Each):

1 Health Centre 3 Community Health Workers Dispensary Hospital Other

Service	Target Population Definition	Expected Target Population With Access	COMPLETE AT BEGINNING OF YEAR:				COMPLETE AT END OF YEAR:			
			Potential Use by Target Population With Access	Expected Use	Use Target for Those With Access	Total Target Population in Health Area	Potential Use for Health Area	Use Target for Health Area	Actual Use	Use Rate for Those With Access
Treatment of Diarrhoea	Children Under Age 5	3,450	10,350	1,450	14%	3,750	11,250	13%		
Measles Immunization	Children Under Age 1	920	920	550	60%	1,000	1,000	55%		
UPT-3	Children Under Age 1	920	920	600	65%	1,000	1,000	60%		
Treatment of Malaria	Children Under Age 5	3,450	5,175	1,294	25%	3,750	5,625	23%		

Comments (for example, assumptions made in setting targets, reasons why targets were or were not achieved):
 Assumptions are that: a) a bridge will be provided over the river between Bornu and Ndamas, b) a community health worker will be assigned to Malaka, c) resources for promotional material will be available, and d) outreach immunization services will be provided to all villages with community health workers.

Signature: _____ Position: _____ Date Targets Set: _____

Date Evaluated: _____

TARGETS
Answers to Exercise D

WORKSHEET ON ORDERING SUPPLIES

A. $1,450 \times 2 = 2,900$

B. $[2,900 \times 0.30] + 2,900 = 3,770$

C. $3,770 - 0 = 3,770$

D. $3,770 \div 1 = 3,770$

PLANNING AND MONITORING ACTIVITIES

ANSWER SHEETS

PLANNING AND MONITORING ACTIVITIES
Possible Answer to Exercise D

MONITORING CHECKLIST:

ORT TREATMENT AREA

Name/location of health centre: _____

Date: _____

Items to Monitor	Satisfactory (✓) or Unsatisfactory (X)	Description of Problems	Comments and Recommendations
LOCATION OF AREA - near staff, water source, toilet and washing facility - pleasant and well-ventilated			
AVAILABILITY/ARRANGEMENT OF FURNITURE - table for mixing solution/holding supplies - shelves - bench with back - small table			
AVAILABILITY/ORGANIZATION OF SUPPLIES - ORS packets - bottles for mixing ORS - cups - spoons - feeding bottles with teats - droppers - mothers' cards - soap - waste basket			

Additional Comments/Recommendations: _____

Signature: _____

PLANNING AND MONITORING ACTIVITIES
Possible Answers to Exercise E

Name of Health Worker Ana Hadgu Date 4 / April / 1987
day month year

MONITORING CHECKLIST:
DIARRHOEA TREATMENT SERVICE

ACTIVITIES OF HEALTH WORKER:	Patient 1		Patient 2	
	Satisfactory	Unsatisfactory (Explain below)	Satisfactory	Unsatisfactory (Explain below)
Assessment of dehydration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preparation of ORS solution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provision of ORS/IV	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Appropriate use of antibiotics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Instructions to mothers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Manner with mothers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recording of treatment on patient records	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MOTHERS KNOWLEDGE OF:				
Treatment of diarrhoea at home with fluids and food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When to bring child back to health worker	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How to prepare and give ORS solution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prevention of diarrhoea at home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LOGISTICS				
Availability of stocks of ORS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Description of problems identified, if any did not provide complete follow-up instructions on what to do at home (continuing ORS treatment, feeding, prevention)

Comments (for example, work done especially well; possible reasons for unsatisfactory responses; change in performance since last time monitored) work done well; complimented

mothers for coming, assessed and treated well, prepared ORS solution correctly, explained when to bring child back, recorded treatment, good manner

Recommendations: give Ana Mothers Cards to provide to mothers

Signature of Supervisor [Signature]
 Signature of Health Worker Ana Hadgu

TRAINING

ANSWER SHEETS

TRAINING
Possible Answers to Exercise A

Task: Give an injection of DPT vaccine.

- Steps:
1. Wash your hands.
 2. If vaccination site is dirty, lightly cleanse it with cotton dipped in methylated spirits.
 3. Remove vaccine from refrigerator and shake the bottle. If there are flakes or if the vaccine is frozen, throw it away and get another bottle.
 4. Wipe stopper of bottle with new cotton dipped in methylated spirits.
 5. Attach disposable needle to syringe.
 6. Remove sheath from needle and insert needle through the stopper of the bottle. Do not allow needle to touch any surface.
 7. Draw vaccine into syringe and withdraw the needle from the bottle.
 8. Insert the needle intramuscularly where the skin has been cleansed. Pull back on the plunger to make sure that the needle is not in a blood vessel.
 9. Inject the vaccine.

TRAINING
Possible Answers to Exercise B,
Individual Feedback

- * What training methods would you use to provide the necessary information?
 - Discussion building on whatever the workers already know about dehydration.
 - Explanation of how to use the chart on signs of dehydration. (This could be combined with the demonstration of how to use the chart, mentioned below.)

- * What training methods would you use to provide examples?
 - Demonstration of how to read the chart (combined with explanation.)
 - Pictures of well babies and dehydrated babies.
 - Demonstration of how to ask, look and feel for the signs on a real baby or child.

- * What training methods would you use to provide practice?
 - Exercises in which the workers hear stories about children with various signs of dehydration and then use the chart to decide how dehydrated each child is.
 - Supervised practice in which the workers assess the signs of dehydration in several children at the health centre. (This might be done along with practice giving treatment.)

TRAINING
Possible Answers to Exercise B,
Group Discussion

Examples of Training Methods	Examples of Advantages	Examples of Disadvantages
Lecture	<ul style="list-style-type: none"> - People are accustomed to receiving information this way. - Lectures may be quickly prepared and easily adjusted for the learners. 	<ul style="list-style-type: none"> - Learners may fall asleep because they are not actively involved. - It may be difficult to find a good speaker who will stay on the topic.
Films	<ul style="list-style-type: none"> - Highly realistic examples can be shown. - Can be replayed many times for different groups. 	<ul style="list-style-type: none"> - May be expensive to obtain. - Require special equipment and electricity. - Films developed for one culture may be inappropriate for another.
Self-instructional lessons	<ul style="list-style-type: none"> - Learner can do the lessons in any setting and at his own speed. - Learner can check his answers quickly and correct any misunderstandings. 	<ul style="list-style-type: none"> - Learners may have questions that are not answered in the text. - Self-instructional lessons require a lot of time and careful writing to prepare. - Learner must have good reading skills. - Such lessons can provide practice in some skills (for example, decision making) but not others (for example, actually giving immunizations).
Role-play	<ul style="list-style-type: none"> - Learners become actively involved in practice. - A good way to practice tasks involving understanding and communicating with other people. - Inexpensive 	<ul style="list-style-type: none"> - Learners must be comfortable with the idea of playing roles; must not be too shy. - If there are specific right answers to be learned, these may not be apparent at the end of a role play.
Apprenticeships (Assignment of a new staff member to work with and learn from experienced personnel)	<ul style="list-style-type: none"> - Learner has chances to practice in real work situation. - Learner learns specifically what he will need to know and do on the job. - Inexpensive 	<ul style="list-style-type: none"> - May be difficult to find experienced personnel who are also good teachers. - Work may slow down while experienced personnel teach new personnel. - If experienced personnel have any bad work habits, these may be passed along to new personnel.

TRAINING

Possible Answers to Exercise C

A. In the space below, write in order the steps that should occur in the training session.

1. Give each community health worker a copy of the table, "How to Assess Your Patient" (also called assessment chart). Explain that the chart should be used when a child presents with diarrhoea; explain that the chart will help the community health workers to decide the child's degree of dehydration and the appropriate treatment plan. It also lists other problems to watch for.

Tell the community health workers that they will practice using the assessment chart during training. As the last part of training, they will use the chart to assess the signs of dehydration and decide appropriate treatment for several children at the health centre.

2. Explain how to use and demonstrate how to read the assessment chart.
3. Demonstrate how to ask, look, and feel for the signs of dehydration and to select a treatment plan with a doll, a real baby, or a child.
4. Show the community health workers pictures of well babies and dehydrated babies. Point out the visible signs of dehydration.
5. Tell the community health workers stories about children with various signs of dehydration. After each story, the health workers use the chart to decide how dehydrated the child is, and to select a treatment plan. Give feedback. Tell additional stories for more practice, if necessary.
6. The community health workers practice assessing the signs of dehydration and determining appropriate treatment in several children at the health centre. Supervise closely, and give feedback. Repeat practice, as necessary, until the health workers can do the assessment correctly and confidently.

B. List any equipment, supplies, outside people, or training aids needed for the training session:

- * 3 charts, "How to Assess Your Patient"

TRAINING
Possible Answers to Exercise C
Continued

- * a doll, a baby, or a child
- * a thermometer
- * pictures of well babies and dehydrated babies
- * (optional) 1 or 2 additional people to act as mothers or children in the demonstrations

EVALUATING PROGRESS

ANSWER SHEETS

EVALUATING PROGRESS
Answers to Exercise A

1a. 11 new episodes of diarrhoea were treated at the health centre on March 1 and 2. (Note: The case of dysentery is included in this total.)

9 were in the target population for the diarrhoea treatment service (that is, in children less than 5 years).

b. 10 new episodes of diarrhoea were treated with ORS on March 1 and 2.

8 were in children less than 5 years.

c. 1 new episode of diarrhoea was treated with IV therapy on March 1 and 2.

This episode of diarrhoea was in a child less than 5 years.

d. 1 new episode of diarrhoea was treated with antibiotics on March 1 and 2.

This episode of diarrhoea was in a child less than 5 years.

The Monthly Use Form for Treatment Services should be completed as shown on the next page.

EVALUATING PROGRESS
Answers to Exercise A Continued

Monthly Use Form
Treatment Services

HEALTH AREA Bornu
MONTH March YEAR 1987

	DISEASES PREVENTABLE BY IMMUNIZATION						NUMBER OF USES OF TREATMENT SERVICES DURING THE MONTH						MALARIA TREATMENT		TRAUMA Totals	RESPIRATORY ILLNESS Totals	UNDER-NUTRITION Totals	OTHER Totals					
	Measles		Pertussis		Neonatal Tetanus		New Episodes Treated		ORS		IV Therapy		Antibiotics						Less Than 5 Years	Totals	Totals	Totals	Totals
	Less Than 1 Year	Total	Less Than 1 Year	Total	Less Than 1 Year	Total	Less Than 5 Years	Total	Less Than 5 Years	Total	Less Than 5 Years	Total	Less Than 5 Years	Total									
Bornu Health Centre	15	10	44	10	2	2	102	77	95	77	10	3	2	2	50	30	10	50	10	20			
Community Health Worker in Senouli Village	2	1	1	1	0	0	51	41	51	41			0	0	16	10	2	7	1	4			
Community Health Worker in Koulaba Village	2	2	0	0	1	1	44	38	47	38			0	0	14	8	2	6	2	5			
TOTAL IN HEALTH AREA	19	13	15	11	3	3	200	156	193	156	10	3	2	2	80	48	14	63	13	29			

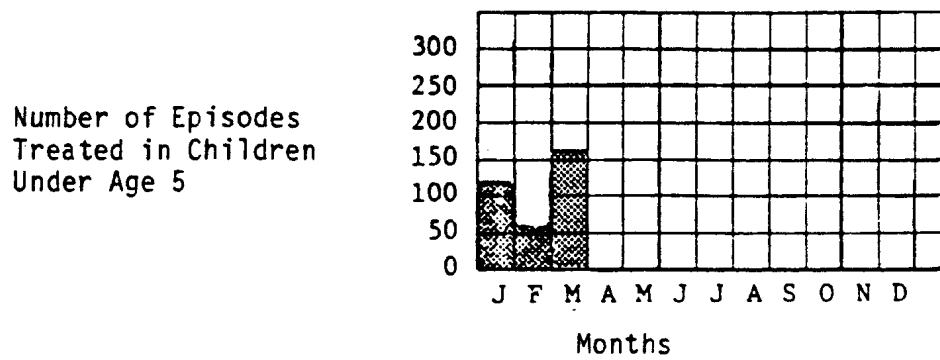
*Target Population - All Ages



EVALUATING PROGRESS
Answers to Exercise B

1. The total number of uses of the diarrhoea treatment service by children less than 5 years of age in Bornu Health Area in March was 156.
- 2.

Monthly Use Graph for
Diarrhoea Treatment Service in Bornu Health Area, 1987



EVALUATING PROGRESS
Possible Answers to Exercise C

1. Use of the diarrhoea treatment service for April 1987 in the Mamba Health Area was much more than use for April 1985 and 1986.
2. Here are some possible reasons for the increase.
 - * It is possible that old records may not be correct, and that the increase is due to better record keeping.
 - * There may have been an unusually high number of episodes of diarrhoea between January and April 1987.
 - * There may have been an increase in the number of children under age 5 in the health area.
 - * It could be that people from outside the defined population with access have been coming for the service.
 - * The promotional campaign for ORS may be effective in convincing mothers of the benefits of ORS in helping their children.
 - * The performance of health workers may be improving (for example, they may be more competent, have better relationships with the community).
 - * It could be that many children who do not need treatment for dehydration are being treated with ORS.
 - * This is the first year that health workers in Mamba Health Area are using ORS. It could be that service has grown in popularity as mothers whose children were treated early in the year and who were pleased with the treatment results have told other mothers.

EVALUATING PROGRESS
Possible Answers to Exercise D

Possible Reasons
for Increase

1. Health workers in the area are teaching mothers to treat diarrhoea at home and are treating all cases brought to them with ORS for the first time in 1987. ORS is very popular, and more mothers than expected are bringing in their children for treatment.

2. Health workers who have recently been trained to provide treatment with ORS are very enthusiastic about it.

3. The promotional campaign for ORS has been effective.

Possible Actions

- Order more ORS to keep up with increased demand.
- Find out whether this new enthusiasm for treatment of dehydration with ORS solution will mean more cases can be treated at home.
- Talk to mothers to find out why they like ORS so that health workers will know what to tell other mothers who use the service.

- Inform health workers of popularity of ORS in the community.
- Compliment health workers on their help in encouraging mothers to accept ORS.
- Find out whether this enthusiasm for ORS means health workers are neglecting other work.
- Encourage health workers to educate mothers on treatment of diarrhoea at home, breastfeeding and proper weaning practices, good hygiene in the home, and proper nutrition for pregnant and lactating women.

- Compliment health workers responsible for the promotional campaign.
- Find out what has made the promotional campaign for ORS effective. If possible, apply what you learn to promotional campaigns for other health services to increase their effectiveness.
- Tell your supervisor about the promotional campaign so he can use it for other areas in his district.

EVALUATING PROGRESS
Answers to Exercise E

EVALUATION WORKSHEET

A-1 2001

A-3 10,350

A-4 $2,001 \div 10,350 = 0.19$

B-1 11,250

B-2 $2,001 \div 11,250 = 0.18$

EVALUATING PROGRESS
ANSWERS TO EXERCISE E Continued

TARGETS AND ACHIEVEMENTS

Health Area: Bornu

Year of Report: From January 1987 Through December 1987
(month)(year) (month)(year)

Types of Health Facilities and Health Workers in Health Area (Indicate Number of Each):

1 Health Centre 3 Community Health Workers Dispensary Hospital Other

Service	Target Population Definition	Expected Target Population With Access	COMPLETE AT BEGINNING OF YEAR:				COMPLETE AT END OF YEAR:			
			Potential Use by Target Population With Access	Expected Use	Use Target for Those With Access	Total Target Population in Health Area	Potential Use for Health Area	Use Target for Health Area	Actual Use	Use Rate for Those With Access
Treatment of Diarrhoea	Children Under Age 5	3,450	10,350	1,450	14%	3,750	11,250	2,001	19%	18%
Measles Immunization	Children Under Age 1	920	920	550	60%	1,000	1,000	506	55%	51%
UPI-3	Children Under Age 1	920	920	600	65%	1,000	1,000	552	60%	55%
Treatment of Malaria	Children Under Age 5	3,450	5,175	1,294	25%	3,750	5,625	518	10%	10%

Comments (for example, assumptions made in setting targets, reasons why targets were or were not achieved):
Assumptions are that: a) a bridge will be provided between Bornu and Prunbas, b) a community health worker will be assigned to Prunbas, c) resources for promotional material will be available, and d) outreach immunization services will be provided to all villages with community health workers.

Signature: Your Name Position: Supervisor Date Targets Set: January 1987

Date Evaluated: January 1988

EVALUATING PROGRESS
Possible Answers to Exercise F

1. * The use target for those with access to diarrhoea treatment by health workers was 14%.
* The use rate for those with access was 19%.

* The use target for the health area was 13%.
* The use rate for the health area was 18%.
2. Yes, there are major differences between the 1987 use rates and targets for the diarrhoea treatment service in the Bornu Health Area.
3. Here are some possible reasons for the differences.
 - Diarrhoea treatment by health workers, including ORS, was more popular and in greater demand in the Bornu Health Area than it was thought it would be.
 - There were more than 3 new episodes of diarrhoea per child during the year.
 - The supervisor of Bornu Health Area based his estimates of expected treatment of diarrhoea by health workers (using ORS) on previous use of services other than ORS, such as Kaolin.

In addition, some of the reasons listed under "REASONS USE MIGHT BE HIGH" on page 18 in the module may apply.

4. Here are some possible reasons for the decline in use in 1988:
 - The number of diarrhoea cases in the community decreased.
 - More people treated diarrhoea at home with fluids and food, so fewer cases needed to come to the health centre.
 - After the first excitement and interest in ORS, health workers decided that giving ORS and teaching mothers took a lot of time. Now they are hurrying and not explaining to mothers what to do. The community is losing interest and going back to traditional ways of treating diarrhoea.
 - A new clinic opened in the area (for example, a mission clinic), and many people now go there.

EVALUATING PROGRESS
Possible Answers to Exercise F
Continued

- The supply of ORS decreased significantly. When people learned that the clinic was usually out, they stopped coming for treatment.
- The government has successfully promoted home fluids.

EVALUATING PROGRESS
Possible Answers to Exercise G

The supervisor could:

- * discourage the doctor from giving antibiotics to treat diarrhoea.
- * teach the doctor about rice gruel.
- * teach the health workers to do health education about rice gruel using the same messages that the government will broadcast by radio.
- * write a use target for ORS that is only slightly higher than last year's, for example, 30%. (Note: This is because he wants to shift emphasis to promoting home therapy.)
- * perhaps write a use target for home therapy that is higher than the ORS target, for example, 50%.
- * assign an older, experienced nurse to the health centre to give breastfeeding advice to new mothers.
- * ask the new nurse to start a breastfeeding support group for the community to be led by mothers with breastfeeding experience.
- * order the same amount of ORS or a little more.