



AMERICAN PUBLIC HEALTH ASSOCIATION
International Health Programs
1015 Fifteenth Street, NW
Washington, DC 20005

Consultant's Report
for
APHA and USAID/India
Fertility and Childhood
Mortality Reduction Project

A Report Prepared By:
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BACKGROUND

Activities undertaken during this consultancy trip were related primarily to the training component of the USAID/India Mission's bilateral Fertility and Childhood Mortality Reduction Project, better known as the Area Project. As the names imply, this project is attempting to improve the death and fertility rates in selected districts in five states. The major thrust of this project is to define and fulfill the needs within the realms of the existing government health programs. The assessment of the needs has been divided into three components:

1. Training needs assessment
2. Communications needs assessment
3. Management needs assessment

The training needs assessment (TNA) was developed and implemented during the past 18 months. The TNA was based on 12 key problems which were agreed upon as the initial target problems for this project.

Key Problems

1. Early age of first pregnancy
2. Short interbirth interval
3. Large completed family size
4. Low birth weight
5. High incidence of birth injury and asphyxia
6. Neonatal tetanus
7. Septicemia
8. Malnutrition
9. Diarrhea
10. Respiratory infections
11. Immunizable diseases
12. Malaria

FCMR Services/Tasks

Family planning
Antenatal
Midwifery
Newborn
Nutritional
Diarrheal
Immunization
Medical
Community health education

With the 12 key problems as the focal points, the services, tasks, and knowledge and skills required for various categories

of health personnel were spelled out (Appendix A). The required knowledge and skills were then transformed into knowledge and skill assessment documents for each category of primary health care worker to be assessed. The Area Project and Regional Health and Family Welfare Training Centre (RHFWTC) staffs performed the assessment on approximately 2,500 persons. The results were revealing, showing surprising weaknesses as well as strengths among those assessed.

As a consequence of these findings, a series of inservice training modules is being developed. These modules are in principle to plug the gaps revealed by the TNA. The basic responsibility for the arduous task of developing these modules has been taken on by the five involved RHFWTCs.

Purpose of the Trip

The purpose of this consultancy as defined by the mission was threefold (a fourth point was deleted due to time constraints):

1. Visit RHFWTCs in each project state to review their prototype training modules for technical content and methodology and assist in completing them for use in training.
2. Review plans of training centers for forthcoming training programs incorporating the finished modules.
3. Develop a monitoring plan to assess the effectiveness and quality of training programs based on the modules.

Schedule

The schedule of events set down by the mission is outlined below, including principal contacts at each point.

MARCH

21 Monday	GOI & USAID	Central Ministry of Health and Family Welfare, New Delhi
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Mr. Das Gupta
Joint Secretary
Dr. M. Bhagat
Deputy Director
Mr. N. R. Yadar
Assistant Deputy Director

USAID Mission, New Delhi
Mrs. Priscilla Boughton
Director
Dr. Rodgers Beasley
Chief, HPN
Dr. Sarama Thomas
Health Advisor
Mr. John Rogosch
Health Administration
Advisor

22 Tuesday

Depart for Simla

23-24

Simla

Shri Vijayendra Singh
Chief Parliamentary
Secretary to the Government
of Himachal Pradesh
Shri A. N. Vidyarthi, I.A.S.
Secretary Health to the
Government of H.P.
Dr. R. M. Bali, Director
Health Services
Himachal Pradesh Kennedy
House
Dr. J. C. Sharma, Director
Project U.S.A.I.D. Area
Development Project
Himachal Pradesh 'Govil
Niwas' Opposite Himland
Hotel
Dr. Hardev Singh, Principal
Health and Family Welfare
Training Centre 'Parimahahal'
Shri B. R. Bhandula
State Education and Infor-
mation Officer, Health and
Family Welfare Department
Himachal Pradesh Kennedy
House
Mrs. Kanta Bhardwaj
Public Health Nurse
Instructor, Health and
Family Welfare Department
H&WTC Parimahahal

25	Friday (AM)	Leave for Kharar	
25	PM		
		Kharar	
26	Saturday		Dr. N. N. Pathak, Principal Sh. G. S. Mathur Health Education Instructor Sh. S. S. Shagufa Health Education Extension Officer Sh. Jagjit Singh Social Sciences Instructor
27	Sunday	Leave for Dehli	
28	Monday	Discussions in Dehli	
30	Wednesday	HFWTC, Rohtak	Dr. (Mrs.) Nirmal Bhatia Dr. Ishwar Singh Nasir, M.L.C.D. Mr. J. N. Mehta, H.E.E.O. Mr. K. G. Dhamija, Sr. Sanitarian Mr. P. K. Puri, H.E.E.O. Mr. N. L. Arora, Sr. Health Inspector Mrs. S. Chhabra, H.E.I. Mrs. Tara Vyas, P.H.N.I.
31	Thursday		
APRIL			
1	Friday to		
3	Sunday (AM)	In Delhi	
3	Sunday (PM)	Depart for HFWTC, Ahmedabad	Dr. (Smt) Kamal Naik, M.B.B.S., D.G.O., Principal Dr. V. H. Sanghvi, M.B.B.S. Medical Lecturer-cum- Demonstrator Shri R. D. Desai, S.C., B.Sc.. Statistician Smt. S. V. Vora, M.A. Diploma in Health Education Health Education Instructor Shri K. R. Shelat, M.A. Diploma in Journalism Social Science Instructor

Shri-G. A. Parmar, B.A., M.S.W.
 Health Education Ext. Officer
 Shri, D. M. Shukla, S.S.C.
 Diploma in S.I.
 Sr. Health Inspector
 Shri, P. B. Joshi, S.S.C.
 Diploma in S.I.
 Sr. Health Inspector
 Smt. Sharma S.R., S.S.C.
 Diploma in P.H.N.
 Public Health Nurse
 Inspector
 Mr. P. M. Patel, S.S.C.
 Diploma in Fine Arts,
 Artist

4 Monday to
 5 Tuesday

HFWTC,
 Ahmedabad

5 Tuesday (PM)

Depart for Bombay

6 Wednesday)
 7 Thursday)

Depart for
 Aurangabad
 HFWTC
 Aurangabad

Health and Family Welfare
 Training Centre, Aurangabad
 (Maharashtra)
 Dr. N. R. Mahendrakar,
 Principal, HFWTC,
 Aurangabad
 Dr. Jyotsna Ghapure
 Health Education Instructor
 HFWTC, Aurangabad

8 Friday

Leave for
 Delhi

II. ACTIVITIES AND OUTCOMES

ACTIVITIES AND OUTCOMES

Refinement of Materials

Dr. Saramma Thomas and the consultant traveled to all five of the state projects. The majority of the time during these visits was spent reviewing the respective modules prepared at the five RHFWTCs. Considerable work had been done at each center. However, as would be expected, the guidelines given previously were variously interpreted, giving rise to considerable disparity among the draft modules. In some instances where considerable rewriting seemed indicated and RHFWTC staff time was at a premium, Dr. Thomas and the consultant took on this responsibility and completed it following the visit (see Appendix B). In most instances, the revisions were either done on the spot or were discussed, with the RHFWTC staff taking responsibility for following through later.

Format Revision

As noted, there was considerable variation in interpretation of the terms used in the format. As a consequence of the discussions with the RHFWTC staffs who had worked on the modules, a consensus evolved concerning some minor but important changes/clarification in format and terminology. The current model is shown below:

Format of Module

Lesson No:

1. Objectives for this session
2. Method of instruction
3. Preparation for session
4. Things to do in classroom in conducting this session
 - Step I
 - Step II
 - Step III, etc.
5. Please remember (for instructor)
6. Notes for students
(An introduction related to FCMR problem to be included)
7. Knowledge review
8. Performance review

Please note: Instructors' materials should contain 1-7.
Students' materials should contain 1, 6, 7 and 8.

Purpose and Methods

The tour also provided an opportunity for the HFWTC to discuss the rationale and the process for training related to the TNA. Some useful suggestions and clarifications came out of these exchanges.

1. It was generally agreed that the underlying purpose for the training is to improve the particular knowledge and skill levels that were found lacking during the analysis of the TNA. However, it was also agreed that it was not advisable to develop modules strictly according to the lacunae shown in the TNA for two reasons:
 - Not all persons are deficient in the same areas.
 - It would result in a patchwork of materials which would be less useful than a more complete work.

It was therefore agreed that the trainer/supervisor should use some discretion in dealing with students. Each module would come complete with pretests and posttests, which should be used to determine how much individual students need to learn about each subject. The amount of time devoted to a given module by a given student could be adjusted accordingly.

2. It was suggested that this inservice training, to be done with the aid of the modules, be considered as an integral part of the supervisory system. For example, health assistants (HAs) supervise health workers (HWs). Continuing education of HWs should be considered one aspect of an HAs supervisory responsibilities. Part of the evaluation of HAs themselves would then include their ability to improve the competence of their respective HWs, as measured by improvements in the HWs knowledge and skills. The training modules themselves should be utilized over time, with periodic revisions, as supervisory tools.

Future Steps Defined

It is clear that considerable editing of the materials thus far produced will be required if the composite training program is to be coherent and reasonably consistent in language, style, format, etc. This would perhaps be best accomplished by a relatively small working group sitting together for 1 to 2 weeks.

Following the completion of the final English version, the

five major steps will remain:

- Translation into regional languages
- Orientation and training of senior staff and trainers
- Pretesting and revision (in local languages)
- Printing and distribution
- Implementation of the module training program

In the interest of time as well as optimal results, several of these steps could be combined or carried out simultaneously. A possible schedule would be as follows:

1. Edit, print (do not permanently bind), and distribute copies of the English version. There should be enough copies for wide distribution at central, state, district, and PHC levels. May 1-July 1
2. Conduct orientation courses for district officials and PHC MOs at RHFWTCS: July 1-Sept 1
 - Emphasize their overall responsibility for supervision.
 - Emphasize monitoring and evaluation.
3. Translate English versions into regional languages, using contract personnel under supervision of RHFWTCS. July 1 - Sept 1
4. Training health supervisors as trainers at RHFWTCS: Aug 1 -Oct 1
 - Two to four weeks.
 - Use opportunity to pretest regional language modules as available.
 - Emphasize practical, in field training.
 - Involve PHC MOs, if possible.
5. Print and distribute regional language modules: Sept 1-Nov 1
 - Bind in looseleaf notebooks.
 - Separate student and instructor versions (approximate 10:1 ratio)
6. Implement inservice training for HWS by HAs: Oct 1-?
 - Begin as first modules printed in

regional languages become available.

- Encourage BEEs and MOs to participate in supportive supervisory role.
- Emphasize ability to monitor learning and impact, as below.

7. Evaluate learning from this training program through ongoing use of module posttest results. Compare these scores with scores from TNA. Use similar knowledge review questions and skill performance rating (taken from modules) for best comparison of results.
8. Evaluate impact of training program through use of minisurveys, as per CNA, 1983 vs. 1984.

Oct 1-?

SUMMARY AND RECOMMENDATIONS

Considering the formidable administrative constraints inherent in such projects, the consultant believes that the TNA and TNA followon components of this project are progressing quite well. Major accomplishments to date include:

- Conceptualization and strategy for the TNA study.
- Organization, implementation, and analysis of study results of 2,500 individuals.
- Agreement among all concerned parties as to the need for remedial inservice training.
- Coherent, workable plan for remedial training and followup monitoring/evaluation.
- First drafts of the required modules completed and ready for final editing.

This is an enormous amount of work by the people involved during a relatively short period of time. This component of the project thus appears to be going well.

Major contributors to this progress are the five RHFWTCs -- Ahmedabad, Aurangabad, Parimahal, Kharrar, and Rohtak -- as well as the staffs of the five state project offices. Coordination of this complex undertaking from the center has likewise been excellent. Morale appears very high, with most who are involved ready to move on into the training phase as quickly as possible. Perhaps most important of all, it is clearly serving as an excellent learning experience for everyone concerned. Specific recommendations for the immediate future are:

1. Conduct a final editing (English version) workshop to be held in Delhi by the end of June at the latest. Invite one representative from each of the five RHFWTCs.
2. Consider consolidating subsequent steps as suggested above. In this regard, a simplified PERT diagram might be useful in sorting out the various steps and their relationships to one another.
3. Emphasize the idea that this inservice training program be considered as an integral part of the supervisory system, with health personnel at all levels having responsibility for optimal measurable outcomes within their respective domains.
4. Develop a posttest for each module to be administered to the students at the time of completion of the respective module. These posttests should be consistent

with but not identical to both the TNA module knowledge and skill reviews. Change examples, numbers, etc., to assess understanding of concepts as opposed to memorizing specific examples and problem sets. The composite results of the posttests could then be used as an ongoing monitoring system for the training. At the completion of all modules by all districts, the posttest results can be compared with the results of the original TNA for an overall learning type evaluation of the training program. For this process, some thought should be given to how formal the evaluation should be. For example, Should the students be allowed to repeat the posttest after more study? And, What role is there for an external examiner, if any?

5. Consider binding the completed modules in looseleaf notebooks or some other manner which will allow for revision of the contents without the necessity of re-printing the entire book. This would be particularly relevant if one considers the first usage of the modules as experimental.
6. Separate the training material into instructor's manuals and student texts. The former would include all parts, while the latter would include only those sections appropriate for students use. See module outline, above.
7. During the editing workshop, have each RHFUTC prepare its own schedule for the next 6 to 8 months, similar to the schedule outlined above. Consider using simple PERT charts for clarity.

APPENDIX A

Trained DAI/CHV Training
Needs Assessment Form

SERVICE/TASK Antenatal	District	PHC	Name _____ Address _____			
D U T I E S	K N O W L E D G E	Score Act. Poss.		S K I L L S	Score Act. Poss.	
1. During regular home visits using stardardized questionnaire, identify all new pregnancies at the earliest possible date.	1.1 <u>Common symptoms of pregnancy are:</u> 1. <u>amenorrhea</u> 2. <u>nausea in the morning</u> 3. <u>urinary frequency increased</u>			1.1 Ability to diagnose early pregnancy.		
2. Communicate with all pregnant women concerning the effects of antenatal care, child spacing, and newborn care upon maternal and infant health.	2.1 Define good AN care <u>AN care in the clinic once during 3/12-6/12, twice during 7/12-10/12, of pregnancy.</u> 2.2 How does good AN care help the foetus and the mother? <u>Detects and or manages high risks which are harmful to the mother and foetus.</u> 2.3 What is a low birth weight (LBW) baby? <u>A baby who weighs <2.5 kg. at birth.</u>			2.1 Interpersonal communication skill		

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CHV TRAINING NEEDS ASSESSMENT FORM

SERVICE/TASK Antenatal	District _____ PHC _____	Name _____ Address _____				
D U T I E S	K N O W L E D G E	Score Act. Poss.		S K I L L S	Score Act. Poss.	
	<p>2.4 List 6 steps in prevention of LBW babies:</p> <ol style="list-style-type: none"> 1. <u>Good AN care</u> 2. <u>Regular intake of fersolate/folic acid</u> 3. <u>Increase diet</u> 4. <u>Decrease activity</u> 5. <u>Lie on the left lateral side</u> 6. <u>Report problems to the worker</u> <p>2.5 Why is it important to lie on the left lateral side? <u>Baby gets more blood.</u></p> <p>2.6 List 6 conditions when a pregnant mother should contact the worker.</p> <ol style="list-style-type: none"> 1. <u>Increased movements of the baby or no movements.</u> 2. <u>Bleeding from the womb.</u> 3. <u>Plenty of water from the womb.</u> 4. <u>Swelling of feet.</u> 5. <u>Severe headache and giddiness.</u> 6. <u>Excessive vomiting.</u> 7. <u>Fits</u> 					

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CHV TRAINING NEEDS ASSESSMENT FORM

SERVICE/TASK Antenatal	District	PHC	Name _____ Address _____		
D U T I E S	K N O W L E D G E		Score Act. Poss.		S K I L L S
	2.7 Mention the best contraceptive method for the following women. 1. Women with 1 child-IUCD 2. " " 2 children-IUCD 3. " " 3 "-Sterilization				
	2.8 When is the best time for starting the above contraceptives? IUCD-6 weeks postpartum TUB-3-4 days postpartum				
	2.9 List three ways of preventing neonatal tetanus. 1. <u>Injections against tetanus during AN period.</u> 2. <u>Delivery in a well lit, well ventilated room with no fresh cow dung on the floor.</u> 3. <u>Not putting cow dung or turmeric powder and ghee on the cord.</u>				
	2.10 List 7 ways of preventing problems in the newborn. 1. <u>Breastfeed immediately after birth.</u> 2. <u>Wash breasts after feeding.</u>				

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CHV TRAINING NEEDS ASSESSMENT FORM

SERVICE/TASK Antenatal	District _____ PHC _____	Name _____ Address _____				
D U T I E S	K N O W L E D G E	Score Act. Poss.		S K I L L S	Score Act. Poss.	
	<p>3. <u>Put the baby always on the side especially after feeds.</u></p> <p>4. <u>Extra clothing in winter.</u></p> <p>5. <u>Wash hands before touching the baby.</u></p> <p>6. <u>Bathe the baby regularly.</u></p> <p>7. <u>Do not put any tumeric ghee mixture on the cord.</u></p> <p>2.11 List preparations for home delivery:</p> <p>1. <u>Choose the room for delivery few days before delivery is due:</u></p> <ul style="list-style-type: none"> o <u>well lighted, ventilated room.</u> o <u>no fresh cow dung.</u> o <u>plaster with mud.</u> <p>2. <u>Ask the woman to prepare small pieces of soft material from old clothes, wash them, and keep them wrapped in clean containers.</u></p> <p>3. <u>The bed to be used for delivery should be put in the sun, the sheets if any to be used should be washed and kept in a clean container.</u></p>					

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CHV TRAINING NEEDS ASSESSMENT FORM

SERVICE/TASK Antenatal	District _____ PHC _____	Name _____ Address _____				
D U T I E S	K N O W L E D G E	Score Act. Poss.		S K I L L S	Score Act. Poss.	
	4. Ask the woman to keep the following ready: - <u>clean newspapers</u> - <u>large container or 2 big degchis</u> - <u>Soap</u> - <u>Lantern</u>					
3. Provide and explain the benefits of fersolate and folic acid to all pregnant women.	3.1 Why is it important to take Iron and folic acid? <u>Iron and folic acid are needed for the production of blood.</u> 3.2 How are the tablets taken during pregnancy? i <u>tab once/day 1st 3/12</u> ii <u>tab twice/day 2nd 8/12</u> iii <u>tab thrice/day rest of pregnancy.</u>					
4. Using standardized guidelines, identify and refer women demonstrating high risk during pregnancy.	4.1 List the high-risk factors detected by asking questions. 1. <u>Age below 16 yrs or above 35 yrs</u> 2. <u>More than 7 yrs since last pregnancy</u> 3. <u>Previous bad obstetrical history.</u>			Ability to recognize a high risk pregnancy by asking questions.		

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D

CHV TRAINING NEEDS ASSESSMENT FORM

SERVICE/TASK Antenatal	District _____ PHC _____	Name _____ Address _____				
D U T I E S	K N O W L E D G E	Score Act. Poss.		S K I L L S	Score Act. Poss.	
	<p>4. <u>Problems in the present pregnancy</u></p> <p>5. <u>History of breathlessness</u></p> <p>6. <u>History of diabetes.</u></p> <p>4.2 List the high-risk factors detected by examination.</p> <p>1. <u>Deformity of leg or pelvis.</u></p> <p>2. <u>Swelling of the feet.</u></p> <p>3. <u>Head not in the lower part of abdomen.</u></p> <p>4.3 What is bad obstetrical history?</p> <p>1. <u>Problems during last pregnancy.</u></p> <p>2. <u>Problems during previous deliveries.</u></p> <p>3. <u>History of stillbirth or death of an infant within first seven days of life.</u></p> <p>4.4 What is the most important thing to keep in mind when a woman is bleeding per vagina?</p> <p><u>NOT to do a vaginal examination because it might increase the bleeding.</u></p>			<p>Ability to recognize swelling of feet.</p> <p>Ability to determine the position of head.</p>		

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CHV TRAINING NEEDS ASSESSMENT FORM

SERVICE/TASK Antenatal	District	PHC	Name _____ Address _____					
D U T I E S	K N O W L E D G E		Score Act. Poss.		S K I L L S		Score Act. Poss.	
	4.5 How are high-risk cases managed? <u>Refer the following immediately to the health case worker:</u> 1. <u>Bleeding per vagina.</u> 2. <u>Severe swelling of the feet.</u> 3. <u>Fits.</u> 4. <u>Excessive vomiting.</u> 5. <u>Excessive or no foetal movements.</u> 6. <u>Plenty of water from the womb.</u>							
	SERVICE/TASK TOTAL				SERVICE/TASK TOTAL			

A-7

APPENDIX B

LESSON III

Topic: Managing (presumptive treatment and referral) fever cases.

Objectives: At the end of this session the students will be able to:

1. Demonstrate their ability to give from memory the appropriate amounts of 4-Amino (and Daraprim in falciparum areas) in cases of fever, following the dosage schedules.
2. Explain when and where patients with fever should be referred.

Methods: Discussion, demonstration, practice (role play).

Things to do:

1. Make preparations for session.
2. Lead discussion and demonstrate giving presumptive treatment and/or referring fever cases.
3. Practice role play.
4. Verify knowledge and performance as per forms.

STEP I

Prepare the following before session begins:

- Dosage schedule on board.
- Specimens of 4-Amino tablets (and Daraprim where required) used in your area for demonstration and "hands-on" practice.
- Conditions for referral on board.

STEP II

Discuss the requirements and dosages for giving 4-Amino tablets (and Daraprim, as indicated).

Discuss the types of cases requiring referral.

STEP III

Write several case histories, such as the following, on the chalk board. Have the students discuss and manage (treat and/or refer) the cases. (Make up some others of your own.)

A mother with a 7-year-old child with a history of fever and loss of appetite reports to you for help.

A 27-year-old woman, 5 months pregnant, comes to you with fever and severe headache, which she has had for 2 days.

A 64-year-old man with fever for 24 hours and a chronic limp comes in for APC's.

STEP IV

Have group divide into pairs. Students should make up their own series of case histories presenting themselves to their partners as patients with fever. They will take turns managing (treating/referring) each other as patients. Make sure that each pair of students practices role playing all different age groups as well as patients with the indications for referral.

STEP V

After the students have practiced treating and/or referring all types of patients, the instructor should verify their knowledge and skills. Each student should be checked by the instructor according to the knowledge review and performance review forms.

Please Remember

Not all students will be able to read and write. It is therefore necessary to have them memorize the dosage schedules and to make sure that all understand clearly the important points in this lesson on treatment.

Notes for Students

1. Presumptive treatment for Malaria (after taking blood films).

Presumptive treatment for malaria means the treatment for malaria before proving that the patient has malaria by looking at blood film under microscope. This presumptive treatment makes the patient better quickly if they have malaria. It also means that he/she can no longer spread malaria to others. However if the blood films show malaria parasites, then the patient must get the additional radical treatment before being cured. (In the falciparum areas presumptive treatment (4-Amino) and radical treatment (Daraprim) are given together).

The steps to follow for the presumptive treatment to malaria are as follows:

- Make sure that patients have eaten something within the past hour so that they have some food still in the stomach before giving 4-Amino tablets.
- Give and observe patients taking the 4-Amino (chloroquin) tablets as per the dosage schedule. Provide water for easy swallowing. (Note: In falciparum areas also give Daraprim as per dosage schedule.)
- If patient vomits, check number of tablets vomited up and give that many again. If patient vomits a second time, give the tablets powdered and mixed with sugar or something else sweet. If patient vomits a third time, refer.

Note: Always make sure that patients have some food in their stomachs before they take tablets. If they vomit, they should take food again before taking the tablets again.

- Fill in the MF-2 register on all cases. If patient is referred for treatment, put an explanation why in the remarks column of the MF-2 register.

2. Dosage Schedules for Treatment

The chart gives the dosage schedules for all age groups for 4-Amino (chloroquin) and Daraprim tablets.

- Daraprim is only given by health guides and trained Dais in areas where falciparum malaria is found.
- Four (4) Amino tablets (and Daraprim in falciparum areas) should be given to all patients, including pregnant women and elderly persons, presenting with fever as presumptive treatment for malaria. Pregnancy and old age are not reasons for withholding treatment.
- Give tablets only after blood film has been taken.

Dosage Schedule for Presumptive Treatment of Malaria

<u>Age Group</u>	<u>4-Amino tablets (Chloroquin 150mg base)</u>	<u>Daraprim tablets 25mg</u>
0-1 years	1/2 tablet (75mg)	1/4 tablet (6.25mg)
1-4 years	1 tablet (150mg)	1/2 tablet (12.50mg)
4-8 years	2 tablets (300mg)	1 tablet (25mg)
8-14 years	3 tablets (450mg)	1 1/2 tablet (37.50mg)
Adults (14+years)	4 tablets (600mg)	2 tablets (50mg)

3. When to Refer

Some cases of fever should be referred for treatment (or additional treatment). These cases are indicated below:

- Any time a patient is unconscious or having fits, refer immediately. Do not try to give tablets. Place the patient on his/her side so that he/she won't choke if vomiting. Sponge body with cool water if fever is very high. Do this on the way to hospital or health center. This is an emergency. Do not delay.
- When the patient is also complaining of severe pain anywhere in the body especially headache, when bending neck, or pain in chest, abdomen, or joints. Give tablets and refer to hospital or health center.
- If a patient vomits the tablets 3 times.
- When patients do not get better within 2 days after receiving presumptive treatment.

Knowledge Review

Explain what to do with the following cases.

- I. A 7-year-old child vomits after you have given the presumptive treatment.
- II. Meera, a pregnant woman, a fever case to whom you have administered presumptive treatment, reports back to you on 3rd day with no relief of any complaints.

Refer to SHC/PHC.
- III. Kamla, a 2-year-old girl, running 40°C. fever and unconscious is brought to you. What will you do?

Refer to PHC?
- IV. Amarjit, a 65-year-old man, comes to you with a history of fever for 24 hours.

PERFORMANCE REVIEW

Have each student demonstrate using 4-Amino
(and Daraprim in falciparum areas) tablets.
What dosage would they give to each patient.

Group below:

<u>Patient Group</u>	<u>Correct Dosage</u>		
	<u>YES</u>	<u>NO</u>	<u>RATING</u>
0-1 Years			
1-4 Years			
4-8 Years			
8-14 Years			
Adults (14 +)			
Pregnant women (same as adult)			
Elderly (same as adult)			

LESSON IV

- Topic: Maintaining records and stocks and dispatching of blood slides.
- Objective: At the end of the teaching session, the trainees will be able to:
1. Fill MF-2 register correctly.
 2. Maintain stocks of daily and fortnightly consumption of 4-Amino tablets and micro-slides.
 3. Dispatch slides correctly.
- Methods: Discussion, demonstration, practice (role play).

Things to do:

1. Preparation by the teacher.
2. Discussion, demonstration of filling and maintaining of records, and dispatching of blood films.
3. Role play (practice).

STEP I

PREPARATION BY THE TEACHER

Gather the following materials before the session.

1. MF-2 register with three case histories of fever.
2. Specimen of correctly filled MF-2 register from the above case histories.
3. Specimen for working out supply needs.
4. Blood films.

STEP II

Thoroughly discuss and demonstrate procedures:

1. Filling in MF-2 register
2. Maintaining stock register
3. Dispatching blood slides

STEP III

Ask the trainees to fill MF-2 forms from the case histories of fever cases given below:

1. A pregnant woman, Bant Kaur, wife of Ram Singh, aged 25 years, living at Sur. Moll 3 in Patti Harijana of Khiala village has reported to you with headache and fever.
2. Kuku, son of Piara Singh, aged 6 months, living at Sur No. 19 in Patti Jattan of village Khialla, has been brought to you with cough and fever.
3. Kanta, daughter of Madan Lal, aged 7 years, living at Gali Bahmana, has been brought to you with 39° C. temperature, vomiting.

Correct the MF-2 forms filled by trainees from case histories.

Review from the mount board/blackboard (a specimen of correctly filled MF-2 proformas from case histories for recording treatment given to each patient).

SPECIMEN OF M.F. 2 REGISTER

Village	H.No/ OPD no.	Name of the head of the family	Name of patient	Age/ Sex	Code no. of blood smear	4-Amino treat- ment given	Date of collection	Rings/Gamets P:F results	Indicate stages p.v. mixed	If+sive give Progress- ive case no.	Remarks
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Khaila	S-113 Patti Harijan	Piara Singh	Bant Kaur	25/F	77/13	4 tabs. 1 tab.	17/12/82				
"	S-19 Patti Jattan	Madan Lal	Kanta	7/FC	77/14	2 tabs.					Vomitted twice 1 tab. wasted (1/2 each time)
"	S-35	Ram Singh	Kuku	6/12MG	77/15	1/2 tab.					
Daily Total:		4 Amino 6 1/2 tabs Microslides 2									

Ask the students to take note of the above.

STEP IV

Have students practice the procedures for dispatching of blood films as follows:

1. Copy the MF-2 register on the MF-2 proforma, making 3 copies.
2. Check blood slides as per code no. of the blood slides from the MF-2 register. According to the serial nos., no blood slide should be missing.
3. Wrap the blood slides in the filled MF-2 proformas. Make packet.
4. Put dates of collection of blood slides from ___ to ___ with code nos. ___ from ___ to ___ outside the packets.

Send the packets of the blood slides to the laboratory every third day for examination or at least to the subcenter or hand over to MHW (M&F).

If the blood slides are not sent in time, these may get fixed with the heat of sun, especially in summer season. Secondly it will delay treatment to positive cases of malaria, if any.

STEP V

Students should discuss why and then practice how to maintain daily and fortnightly stock records and to use those records for reordering the needed numbers of tablets and slides. Use the following points and proforma for guidance.

Why are daily and fortnightly totals needed?

- To know drugs and microslides consumed?
- To know the balance for procuring new stocks?

How much stock should be with them at the beginning of each fortnight (1st and 15th of each month)?

4-Amino	200 tabs.
Microslides	50
Daraprim	50 (only in area of p. falciparum infection)

Why should students keep up their stock?

If they run out of the stock, they won't be able to serve the people and the people won't bother to visit them again.

Where are new stocks obtained?

From the health worker (male) either during his visit to the village or directly from the subcenter.

Where and when should fortnightly totals be recorded?

Leave 6 pages at the end of MF-2 register that will serve as your stock register for NMEP activities. Do fortnightly total of all the items consumed. Add items consumed from 1st to 15th; on the 15th of each month and again from 16th to 30th/31st; on the 1st of each month.

Use the following form for recording.

Date: 15 August, 1983

Name of Items	Opening balance	Consumed	Balance in hand	Required
4-Amino tablets (150mgs)	200	50	150	50
Daraprim (25mgs)	50	24	26	24
Microslides	50	16	34	16

Practice filling in the form below according to amount of stocks used under different conditions (use a pencil).

Date: _____

Name of Item	Opening balance	Consumed	Balance in hand	Required
4-Amino tablets (150mgs)				
Daraprim (25mgs)				
Microslides				

Things to remember

These are complicated procedures. Most of the time should be devoted to guiding students in filling the forms themselves.

Student Notes:

N.A.

KNOWLEDGE REVIEW

1. What is the frequency of sending blood films to the laboratory?
2. Why is it important to send the blood films every third day?
3. How much stock should be with them at the beginning of each fortnight?
4. Why is it important to keep up the stock?

PERFORMANCE REVIEW

- A. While observing pairs of students role play filling MF-2 registers, see whether they record one of the following case histories properly:
 1. Pregnant woman 20 years old.
 2. Infant 2 months old.
 3. Child of 10 years.

FILL MF-2 REGISTER:-

	<u>Yes</u>	<u>No</u>	<u>Rating</u>	<u>Remarks</u>
1. Village				
2. Name of house/address				
3. Name of patient/person				
4. Name of head of family				
5. Age/sex				
6. Code no. of blood smear				
7. Treatment - 4-Amino Paracetamol Daraprim (If areas have p.f. infection)				
8. Date of collection of blood smear				
-				
-				
-				
9. Remarks				

Rating Code:

- * 1. Inadequate
- 2. Needs improvement
- 3. Satisfactory
- 4. Above average
- 5. Excellent

B. While observing a student fill stock register, observe the following:

	<u>Yes</u>	<u>No</u>	<u>Rating</u>	<u>Comments</u>
Tally daily tablets of drugs/items consumed for treating fever cases:				
Add up columns:				
1) 4-Amino tablets consumed				
2) Daraprim tablets consumed (in P. falciparum areas).				
3) Microslides consumed.				

WORK OUT FORTNIGHTLY CONSUMPTION OF ABOVE:

Add up daily items consumed from 1st to 15th and 16th to 31st of each month:

- 1) 4-Amino tablets - 50 tablets consumed in a fortnight.
- 2) Daraprim tablets - 24 tablets consumed in a fortnight.
- 3) Microslides - 16 consumed in a fortnight.

WORK OUT SUPPLY NEEDS FORTNIGHTLY:

Sr. No.	Items	Opening balance	Consumed	Balance in hand	Required
1.	4-Amino	200			
2.	Daraprim	50			
3.	Mircoslides	50			

C. Dispatching of blood films.

While a trainee dispatches blood films, observe the following:

	<u>Yes</u>	<u>No</u>	<u>Rating</u>	<u>Comments</u>
1. Copy the MF-2 register on the MF-2 proforma, making 3 copies.				
2. Check blood slides as per code no. of blood slides from MF-2 register according to serial nos.				
3. Wrap blood slides in MF-2 proforma.				
4. Make packet.				
5. Put dates of collection of blood slides from _____ to _____ with code nos. from _____ to _____ outside the packets.				

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LESSON V

Topic: Community Education on Prevention of Malaria.

Objective: At the end of this session the students will be able to:

1. List factors responsible for the prevalence of malaria.
2. Educate the population on malaria control:
 - Individuals
 - Informal groups
 - Families
 - Fever case

Methods: Discussion, practice role play.

Things to do:

1. Conduct discussion on prevention of malaria.
2. Have students role play giving malaria prevention talks.

STEP I

Lead a discussion about the causes of the high incidence of malaria cases in villages. Ask students to describe why they think malaria continues to be a major health problem. List the important points for reducing the spread of malaria on the board.

STEP II

Discuss the important points to be covered in a talk on malaria.

STEP III

Discuss the important points to be remembered for how to conduct an educational talk.

STEP IV

Have students pair up and role play giving talks on malaria prevention. Observe students as they are in the process giving the talks to see if they are following the points as given on the performance review form.

Please remember

Community education on disease prevention is one of the most important tasks of the health guides and trained dais. Malaria is one of the most virulent and potentially preventable diseases. This session is therefore one of the most important sessions. Sufficient time and effort should be devoted to it.

STUDENT NOTES

- I. What the community should know and do to reduce the prevalence of malaria.
 1. How malaria spreads.
 2. The role of mosquitoes in spreading malaria. The breeding places, resting habits, biting habits of mosquitoes and how to protect themselves from mosquito bite.
 3. Report fever cases for blood smears and treatment.
 4. Cooperate with spraying teams in getting each and every corner of the house sprayed.
 5. The effectiveness of the insecticide sprays and the need to leave sprayed surfaces undusted.
 6. Prevention of breeding of mosquitoes by using local resources.
- II. Talking points for community education concerning malaria.

Malaria is a type of fever which is prevalent in the country from May to October, especially more during the rainy season.

It is caused by malaria parasites.

The malaria parasites are transmitted from a malaria case to another person through the bite of an infective mosquito.

It takes 10-20 days for the mosquito to become infective after taking blood meal from a malaria case. When it becomes infective, it passes malaria parasites while biting another person.

Fever appears in a person 0-20 days after being bitten by an infective mosquito.

We can prevent malaria if we kill or do not allow malaria mosquitoes to breed.

OR

We eliminate malaria parasites by treating malaria fever cases by giving them presumptive and radical treatment.

Mosquitoes breed in water collected in unused containers lying in the open, broken pitchers, overhead water tanks, other water tanks, slow moving streams, village ponds, etc.

Mosquitoes live in cool, dark places.

Mosquitoes fly at dusk and at night usually between 11 P.M. to 1:30 A.M.

TO PREVENT MALARIA

- Eliminate water collections such as unused containers; destroy broken pitchers, etc.
- Fill small water collection places with earth or drain them weekly.

TREAT BIG WATER COLLECTIONS:

Sprinkle malaria oil in big water collections 16-20 liters in one acre surface area every week. Don't put malaria oil in ponds where animals drink water.

PREVENT MALARIA MOSQUITOES FROM ENTERING HOUSES BY:

Screening the windows and doors and putting water seals on outlets.

Protect yourself from mosquito bites by using mosquito nets or repellent creams at night (e.g. Odomos) or make at home. Put 2 ounces of vaseline/coconut oil in sun to melt. Add 1/2 ounce of citronella oil and 1/4 ounce of spirit of camphor and mix thoroughly. Before sleeping, massage this cream on the naked parts of the body -- hands, lips, neck, arms, forearms, legs, feet, etc.

For double protection, sleep inside screened rooms and also spray that room with flit:

Purchase a flit pump.

Spray flit into closed room: 1 ounce flit spray is sufficient for 1,000 cubic feet of surface. You can make flit spray yourself, using the following:

D.D.T. technical	50 gms.
Pyrethrum rytract	30 gms.

Report to medical officer in charge of Subsidiary Health Centre/Dispensary/Hospital/PHC whichever is nearest to you, if the fever does not come down after taking treatment for 2 days from the health guides.

SUMMARY

Encourage people to do the following to prevent spread of malaria:

1. Eliminate breeding places.
2. Protect against mosquito bite.
3. Report fever cases.
4. Get blood tested for malaria.
5. Take presumptive/radical treatment.
6. Accept spray.
7. Cooperate with health workers during home visiting by answering the 4 questions they ask about fever cases.

III. How to conduct community education talks.

1. KNOW PURPOSE OF VISIT.
2. Prepare yourself well and have complete and correct information about the subject so that you may be able to answer the questions which are commonly asked.
3. Take some simple teaching aids with you to facilitate learning.
4. Only contact people whom you want to teach or learn from.
5. Contact that person at a time when you think he/she is usually free.
6. Give full introduction. Spend time to get acquainted so that you can talk on the same level.
7. Be friendly.
8. State purpose of your visit.
9. Use local language.
10. Make sure questions are understood.
11. Encourage the person to raise questions or doubts about the topic.
12. Listen carefully and answer questions patiently.
13. Help the person to decide what action to take.
14. Show appreciation for cooperation and participation in discussion.
15. Postpone teaching if the situation is inappropriate.
16. Never pass on any message when you are in a hurry.
17. Pave way for next visit.
18. Thank the person at the end.

KNOWLEDGE REVIEW

1. Name the places where malaria mosquitoes breed.
2. Name resting habits of malaria mosquitoes.
3. What education will you give to households about spray?
4. What education will you give to fever cases?
5. How can mosquito breeding sites be eliminated?
6. How can people protect themselves from mosquito bites at night?
7. What should people do to eliminate mosquitoes from the house?

PERFORMANCE REVIEW

While observing a student giving a malaria education presentation, see if the following points are covered:

1. Find proper respondent.
2. Contact at appropriate time.
3. Give full introduction.
4. Be friendly.
5. State purpose.
6. Use local language.
7. Use simple visual aids (as appropriate).
8. Make sure questions are understood.
9. Listen carefully.
10. Cover all points.
11. What is malaria?
12. When does it spread?
13. How does it spread?

14. Where do mosquitoes breed?
15. Eliminate breeding places.
16. Treat breeding places.
17. Protect against mosquito bites by using:
 - Gauzing houses
 - Repellent creams
 - Mosquito nets
18. Report fever cases immediately.
19. Get blood tested for malaria.
20. Accept spray.
21. Prepare houses for spray.
22. Get each corner of houses sprayed. Not to dust/desmeat/wash after spray.
23. Show appreciation for cooperation and participation in discussion. Thank respondent.

SPECIMEN FLIP CHART # 1

(For use by Instructor in teaching
health guides/trained dais)

FACTORS RESPONSIBLE FOR PREVALENCE OF MALARIA

LACK OF KNOWLEDGE ABOUT:

1. How malaria spreads.
2. Role of malaria mosquito:
breeding, resting, and biting habits.
3. Preventing mosquito breeding.
4. Protecting mosquito bite.
5. Period of effectiveness of insecticides.

LACK OF COOPERATION TO:

6. Spraying teams.
Dusting/desmearing/washing sprayed surfaces.
7. HEALTH WORKERS.
8. Nonreporting fever cases.

Refusal in:

- Getting blood tested.
- Getting presumptive/radical treatment.

SPECIMEN FLIP CHART # 2

POINTS FOR PREVENTION OF MALARIA

DEFINITION: Malaria is a type of fever caused by a malaria parasite, which is carried from a case of malaria to a healthy person through the bite of an infective malaria mosquito.

PREVALENCE: Rainy season.

CAUSE: Malaria parasite.

MODE OF SPREAD: Bite of malaria mosquito.

EFFECT ON HEALTH: Extreme weakness; anaemia can cause death.

PREVENTION OF MALARIA:

1. Prevent mosquito breeding.
 - Eliminate breeding places by filling, emptying, draining.
 - Treat breeding places, eating - malaria oil - larvae fish - used Mobil Oil. Dust Paris Green in rice fields.
2. Protect against mosquito bite.
3. Accept spray:
 - Prepare houses for spray.
 - Get each corner of house sprayed.
 - Do not dust/desmear or wash sprayed surfaces.
4. Educate fever cases:
 - Use mosquito nets, repellent creams, space spray, screen houses.
 - Report fever cases to:
health worker during home visits.
Health agencies--S/C DDCs, Ftd, Disp., hosp., PHC, etc.

- Get blood tested for malaria.
- Get presumptive treatment/radical treatment:
 - Self course - to prevent relapse.
 - To prevent malaria in community.
 - Take ample fluids.
 - Resume duty when feel normal.

Formal Training at...

Category	HFWTC	PHC level	Trainer	Cont. Edu. Trg.in Field	Trainer
District Officer, Project Officer and Dist.Supervisor	3 days	--	HFWTC	--	
Medical Officer PHC/FP	7 days	--	"	--	
Medical Officer CHV/BEE	10 days	--	"	--	
Health Supervisors	30 days	--	"		
Male	(6 days every 6 months at PHC by HFWTC staff & MOs)	--	"		
Female		--	"		
Health Worker --					
Male	--	10 days	Medical Officers (3); BEE (1); Health supv.(2)	One module per day. 40 to 50 days working (worker-trainer approach)	Health supervisors
Female					
CHVs	--	10 days	MO-CHV; BEE; health supv.; health workers	One module per day. 40 to 50 days working (worker-trainer approach)	Health worker
Trained dais	--	7 days	Medical Officer Lady health visit pr.	One module per day 40 to 50 days.	ANM

0.1

Objectives orientation courses:

1. State and explain the goals and objectives of Area project.
2. State and explain the 12 FCMR problems.
3. Key FCMR services/task in relation to job descriptions.
4. Training need assessment and results.
5. Inservice training strategy.
6. Continuing education modules.
7. The relationship between supervision and inservice training.
8. The purpose and use of supervision/inservice training-monitoring system.