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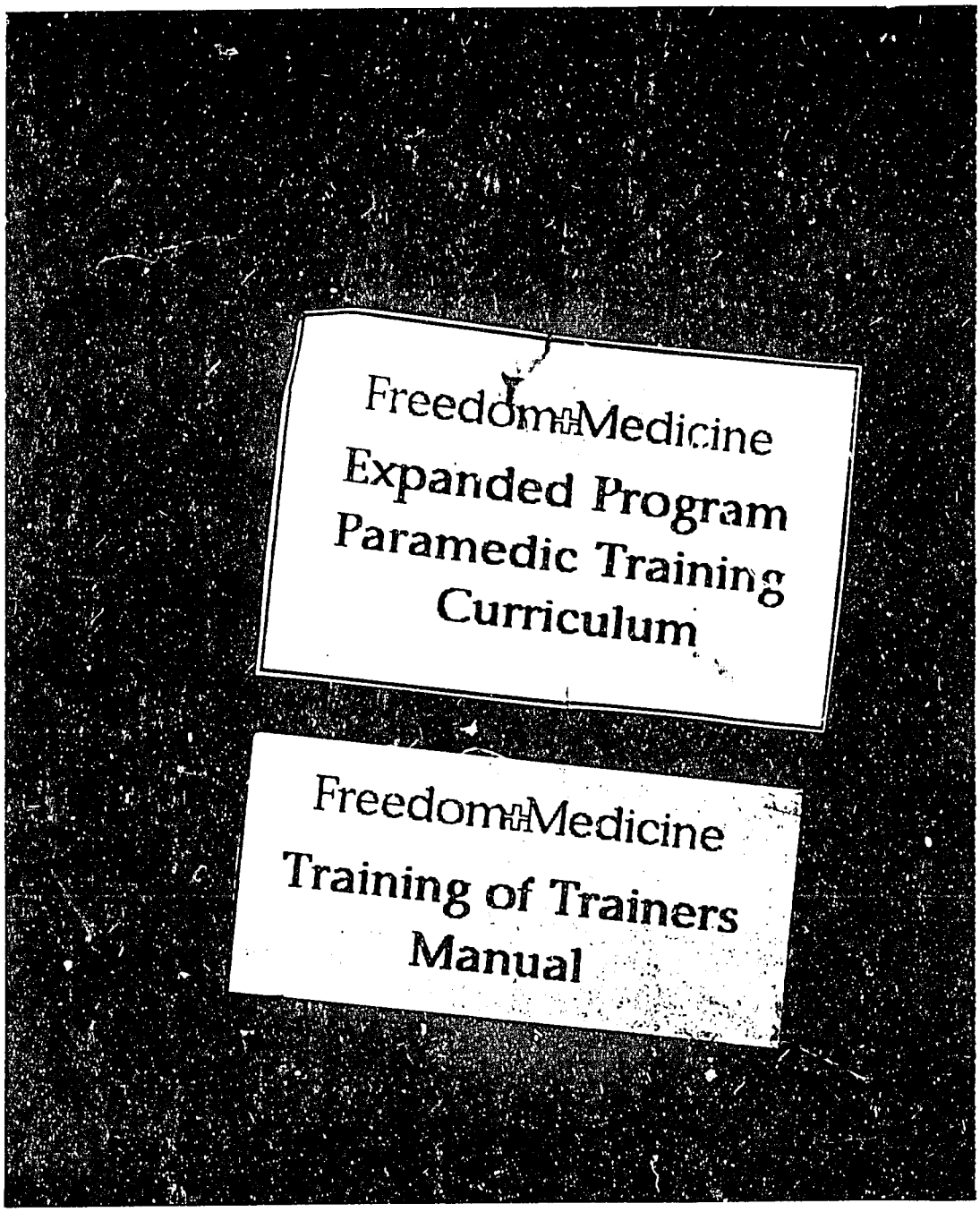
EXPANDED PROGRAM PARAMEDIC TRAINING
CURRICULUM.

GUIDELINES



FREEDOM MEDICINE

TRAINING OF TRAINERS MANUAL

June 7, 1990

Susan Purdin, R.N.

ACKNOWLEDGEMENTS

This manual is the work of many people.

The sources from which I borrowed most heavily were:
Helping Health Workers Learn by David Werner and Bill Bower
TEACHING for better LEARNING by F.R. Abbatt
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INTRODUCTION

Training of Trainers is a necessary component of a technical training program. It is erroneous to assume that people who are proficient in a technical field will be able to teach others what they know. It is, of course, necessary that the trainer have technical skill; but the trainer must also know training techniques in order to teach. The purpose of the Training of Trainers program is to develop training skills in people who are technical experts. We usually teach as we were taught; but there are many teaching techniques available to which we may not have been previously exposed.

The Training of Trainers program is designed for ten participants. It runs six hours a day for five days and for three-and-one-half hours on the sixth day.

The underlying philosophy supported by the TOT is that a curriculum designed to teach technical skills should be competency-based and that training techniques should be active.

PREPARING LEARNING ACTIVITIES

In a competency-based training program the students take an active role in directing, pacing, and monitoring their learning. This approach encourages interaction between students and instructors that is important for adult learners. The learning activities increase motivation, improve knowledge retention, and prepare students for their work.

The following principles of competency-based learning are used in the curriculum.

Students are taught in a step-by-step process, moving from the simple to the complex. For example, students learn how to take a medical history and perform a physical examination. Then they learn to focus the medical history and physical examination and recognize symptoms and signs of health problems. They learn to diagnose and care for health problems during their clinical experiences.

Students are told why they need to know and remember certain facts and skills. For example, community health is introduced early so that students will understand the value of prevention and health promotion when they learn about health problems later on.

Students are given ample opportunity to apply knowledge and skills during practical experiences.

Students are periodically evaluated so that their

practice can be corrected until they accurately perform the desired skills.

Within reason, students are allowed to learn at their own pace. Some students learn from lectures, some from discussion, and others from self-instructional activities. Many need direct experience to learn. Combining these methods accommodates many different learning styles.

Teaching plans guide the instructors. Each teaching plan includes a set of learning activities by which the instructor works with the students to reach the objectives of the session. For example, the instructor may "conduct a discussion session" or "organize a role-play." The instructors should be capable of using all the teaching methods and techniques that are called for in the teaching plans.

USING ACTIVE APPROACHES TO LEARNING

The teaching plans guide the instructor to use active, learner-centered approaches to help students develop new skills. Active learning is based on the belief that learning emerges as the result of meaningful experiences. The instructor offers students opportunities to learn from experience. Activities and exercises are the first step in the active learning sequence. Then the students review the activity through reports and discussions. They compare the learning activity with the real work environment and assess the value of the learning experience. The learning sequence is complete when students apply their new behaviors in a clinical setting that is similar to their work setting after graduation.

The following active teaching methods are often useful:

Active Lectures

Formal lectures are passive. The students do not respond. An active lecture is informal. The lecturer encourages discussion and uses visual aids. Follow these guidelines to help make a lecture an active learning experience:

a. Be enthusiastic about the information you are sharing.
b. Know your topic.
c. Speak clearly.
d. Talk loudly enough for the person furthest away to hear.

e. Do not distract the group with nervous habits such as pacing, talking in a monotone, leaning or sitting on a desk, or fumbling with papers or small objects.
f. Move naturally and use gestures to help emphasize important points.
g. Use familiar language.
h. Use humor.
i. Use examples and visual aids to illustrate your points.
j. Direct your comments, questions, and glances to actively involve all members of the group.

Discussion Questions

Be sure to ask questions during lectures. Used well, questions can help to stimulate student interest and motivation. You can use questions to evaluate how much students know and have understood. Questions can help you find out about students' strengths and weaknesses. They can help you start discussions and review lessons.

Questions often help students to look in new directions for solutions to problems and to seek additional information on their own.

There are three levels of questions. The first concerns only knowledge. You ask the student to remember certain facts. You do not require the student to think, only to remember. Still, knowledge questions are important. They find out whether the student has learned the basic facts that he needs to do his work.

The second level of questions asks students to apply their knowledge to different situations. This type of question helps students remember what they have been taught because they are now asked to use that knowledge. They begin to see why it is necessary to learn certain facts. If a student can see a reason for learning something, he is much more likely to learn it.

Problem-solving questions are the third level of questions. Problem-solving questions require the student to consider alternatives. Problem-solving questions involve much more thought than the other two levels of questions.

The number of questions you ask is not as important as the type and level of questions you ask, how you ask them, and how you deal with the responses of the students. If you build your lessons on the answers you receive, they will be lively and stimulating. The students will be thinking, taking part, contributing. Learn to ask exploring questions and digging questions.

a. Exploring questions

Exploring questions discover what the student knows or thinks. Exploring questions usually have to do with the knowledge level of questioning, but can often be used at the application and problem-solving levels. At the knowledge level, you are interested only in whether or not the student knows certain facts. You expect the student to answer yes or no, or to explain, identify, or name something. You know the correct answer to the question. An example of this type of question is " How many times does the heart beat per minute?"

You can also use exploring questions at the higher levels. In this case, you do not always know the correct answer. You are encouraging the student to think for himself. An example of this kind of question is "What would be the best method of giving continuing education to a health worker?" This question asks the student to state his opinion, defend it, find alternatives, and see new possibilities.

b. Digging questions

When a student does not respond correctly or appropriately to an exploring question, you can tell the student he is wrong and give him the correct answer. Very often,this will make the student feel uncomfortable. He will be unlikely to want to learn more. It is better to use digging questions to find the correct response.

You can ask digging questions in five ways. First, you can give the student hints or clues to the correct answer. This helps the student remember the facts necessary to respond correctly.

Or, you can ask the student to clarify a response or to state an incomplete answer more clearly. Consider these examples:

Instructor: Why do babies often develop diarrhea at the time of weaning?

Student: They start taking the same foods as older children and adults.

Instructor: Right. But why should this cause diarrhea?

Student: Milk, water, and other foods are not really suitable for them.

Instructor: You are partly right, but can you tell me why you think these foods are sometimes not the best things for a baby to have?

Student: Well, breast milk is clean.

Instructor: Are milk, water, and other foods not clean?

Student: They often get contaminated.

Instructor: Right. Now you can answer the first question again. Why do babies often develop diarrhea at the time of weaning?

You can ask the student to give reasons for his response to an exploring question. This lets you find out if the student really understood his first answer.

When a student has answered one question correctly, you can ask the student to expand on his response to discover how far his understanding goes.

Finally, you can ask the same question to several students, one after the other. Then you involve the entire class. You give each student an opportunity to take part in the discussion.

Visual Aids

Visual aids encourage the students to take part in lectures and discussions. Visual aids help the students understand and remember the information that you present. Commonly used visual aids include flashcards, flipcharts, models, posters, chalkboard, slides, and filmstrips. Here are guidelines for using a chalkboard and flipcharts.

a. Chalkboard

A chalkboard is one of the most commonly used visual aids. Follow these guidelines for using a chalkboard.

Have the chalkboard ready before the session. If possible, write the information you want to present before you begin your lecture.

Position the chalkboard where everyone can see it.

Use colored chalk if available to emphasize the main points.

Stand to one side of the chalkboard so that all students can see it.

Do not talk to the chalkboard.

Make sure that your writing is large enough for everyone to see.

Keep your drawings simple.

Write clearly.

Do not put too much information on the chalkboard at any one time.

Chalkboards are inexpensive and can be produced locally. They allow you to present a concept in a step-by-step way. They are adaptable to a range of purposes. But chalkboards also have limitations. chalkboards require considerable skill for effective use. Your back is usually to the audience. Also, your content will be erased and cannot be preserved for future use.

b. Flipchart

A flipchart is a set of large drawings arranged to present content in a particular order. The drawings are fastened together at the top edge. They are fixed on a board or stand for support. The drawings usually follow a sequence to tell a story or show the steps of a procedure. As each drawing is used, it is flipped over to reveal the next drawing in the sequence. Follow these guidelines for using flipcharts.

Plan your presentation according to your objectives.

Use flipcharts with a large group of ten to fifteen students.

Make one drawing for each message.

Keep the drawings simple.

Write your message on the back of the drawing that comes before it. Then, people will see the picture while you read the message. Position the flipchart so that everyone can see it. Stand to one side so you can read the message and the students can see the drawings.

Find out if the students understand the drawings.

Allow students to participate in the presentation.

Summarize and discuss the presentation at the end. Repeat important points.

Flipcharts are easy to produce when you have drawing skills. They always stay in sequence because they are bound at the top. Flipcharts are useful when you want to show the steps of a procedure or to tell a story with pictures.

Role-Plays

Role-plays are an acting out of a real situation. Role-plays help students consider all aspects of a problem and let them experience differences in opinions, beliefs, and attitudes. Role-plays help students gain new knowledge and insight which they can apply in their jobs. Role-plays are especially useful in developing communication and teaching skills. For example, students can role-play discussions with community leaders to gain support for a health activity, discussions about the responsibilities of the health team, or discussions with mothers to identify health practices that can cause diarrhea.

Follow these steps to develop, prepare for, and carry out a role-play.

a. Identify your training objectives.

b. Collect facts, typical incidents, and problem situations related to the training objectives.

c. Describe the background and setting of the role-play.

d. Write instructions for each of the roles.

e. Write briefing notes for the participants and the observers.

f. Prepare notes to guide discussion after the role-play.

g. Collect props and supplies needed for the role-play to make it resemble the real situation.

h. Select and brief the participants and the observers.

i. Have the participants act the parts assigned to them. They should portray the roles as they believe the characters would behave in that situation.

j. Have the observers take notes or remember comments that they wish to share with the group.

k. Follow the role-play with a discussion and review of issues that arose. Encourage participants and observers to share their comments and observations.

Case Studies

Case studies help students develop problem-solving skills. Case studies provide the students with basic information about a problem. The students study the information and apply their knowledge to solving the problem. Some case study problems have a definitive solution. Others are open-ended. For example, the case studies in general clinical sessions may have one correct answer. More variation is expected in answers to case studies about managing personnel problems in the health center.

Case studies can be the starting point for a class discussion. Or the students can read and answer case study questions individually. Case studies can also be used as a small group problem-solving activity. The best way to write case studies is to document actual problems and issues in the health system.

Return Demonstrations

In a return demonstration you show the students how to perform a skill and then have the students practice the skill. The students learn by seeing, doing, and receiving comments on their performance. Follow these steps to prepare for and conduct a return demonstration.

a. Gather the necessary equipment or supplies. Locate equipment and supplies that are typically found in the actual setting. for example, if the students are from small, rural communities, use materials commonly available in small, rural communities. Do not use materials available only in cities, towns, health centers, or hospitals.

b. Explain the purpose of the demonstration. Tell the students that they will be expected to demonstrate the skill later.

c. Go through the steps of the demonstration clearly and slowly. Explain each step. Answer questions about the steps.

d. Summarize and discuss the steps at the end of the demonstration.

e. Ask for a volunteer to demonstrate to the others. Gently correct any mistakes. Encourage questions and discussion.

Direct Experience

Direct experience includes home visits and skill practice. Students practice their skills in a real-life situation.

a. Home visits

Home visits offer students an opportunity to get to know community members and learn about their needs and problems. The students can deal with actual problems right where they take place. They can teach people to care for and prevent health problems. They can also find out who is interested in taking part in community health activities. However, home visits do have some limitations. First, they take time. The number of families a student can reach is limited. Families not visited might get discouraged. Also, the student may not be able to respond to all the problems of the family.

b. Skill practice

Skill practice means applying classroom learning to a work setting. Skill practice locations include hospital wards, outpatient clinics, health centers, and maternal and child health clinics.

Follow theses steps to prepare for skill practice experiences.

- Prepare objectives

- Prepare a schedule of activities. encourage the students to take part in the planning process.

- Arrange for transportation and financial support for the students.

- Coordinate planning with the practice site representative.

- Evaluate the experience in terms of the stated objectives, the performance, the attitude and recommendations of students, and the observations and recommendations of the practice site staff.

EVALUATING STUDENT PERFORMANCE

Evaluation of the students, the training materials, and the instructional process completes the training program. The information gathered during evaluation has both immediate and long term importance. During training the students receive reports of their progress toward meeting the learning objectives. Students who progress slowly can plan additional learning opportunities with their instructors. Students who progress at a faster pace can help others or can broaden the depth of their learning. Evaluation information also helps the training staff plan future classes. The information about student performance and he opinions of the students about the teaching process will help identify those aspects of the program that are most successful and those that need improvement.

Instructors must be able to prepare tests to measure knowledge and skill performance.

Assessing Knowledge

Knowledge recall is a prerequisite for problem-solving. The instructors sometimes give selection tests to help identify candidates for the training program. They give pretests to assess the student's knowledge at the start of the teaching activities. During the teaching sessions, the instructors informally assess student progress by asking questions about the content of the session. Finally, posttests assess how much information the students have acquired during the teaching of an entire module.

a. Selection tests
You may consider using a test of knowledge as one tool for selecting candidates for the training program. You can get an idea of the students' knowledge of subjects to be taught by sampling posttest questions. The most useful way to interpret the test results is to describe the types of information that each student knows and does not know.

b. Pretests
Pretests are tests of knowledge before instruction. Pretests can help you decide how and what to teach. Questions on the pretests reflect the objectives of the module.

Pretest scores are useless as numerical scores only. However, you can use pretests to help plan instruction. You can define each student's strengths and weaknesses in a particular subject. For example, suppose on the pretest for the Anatomy and Physiology module one student correctly answered all the questions about the heart and the respiratory system. However, he was unable to answer any questions about the genitourinary system. Another student could answer all the questions about the heart and the respiratory and genitourinary system. If you were teaching how would you use this information?

You can also find classwide patterns of knowledge. For example, suppose 95% of the class score below 80% on the pretest for the community health module. If you were teaching, how would you use this information? After analyzing the pretests, you can adjust the training program in two ways. You can change the training schedule by adding, deleting, or changing the learning activities. Or, you can change the individual learning experiences for students. For example, you can assign students who have mastered or nearly mastered certain knowledge to be group leaders or tutors. They can share their experiences with those who have less knowledge.

c. Posttests
The knowledge tests at the end of each module are called posttests. The posttest questions reflect the learning objectives from the corresponding modules. Every student is expected to score at least 80% on each posttest. Students who score below 80% are given additional opportunities to learn and are tested again. The instructors choose remedial learning opportunities to match the weaknesses in content that the tests revealed.

Keep in mind, however, that the failure of the students to score above 80% on a posttest may also reflect problems with the student text material, the learning activities, or the quality of instruction. Or, the posttest may have been poorly constructed. For example, suppose that only 10% of the students correctly answered one question on the pretest, but 90% answered the same question correctly on the posttest. This is an 80% improvement in student response. But suppose that 10% answered correctly on the pretest and only 30% answered correctly on the posttest. This is only a 20% improvement. The instructor might not have emphasized the information in class. Or, the learning activity related to the second question might not have been effective. You can review the information and carry out additional learning activities so that the students have the knowledge they need to perform their jobs. With the next class you can change the learning activities.

Each of the evaluation tools for assessing knowledge in the curriculum is made up of short answer questions, multiple choice questions, and case study questions.

a. Short answer questions

Short answer questions require students to recall a particular set of knowledge. Short answer questions usually ask students to make lists, explain causes, or fill in some missing information. Short answer questions can cover many topics in a relatively short period of time since the student's response is brief. Short answer questions are quickly and easily graded.

Here are some examples of short answer questions.

> Why is it important to look a the whole picture when you are trying to identify causes of health and disease in a community?
>
> What is the purpose of doing an inventory of facilities and equipment?

b. Multiple choice questions

Like short answer questions, multiple choice questions test the students' knowledge recall. But multiple choice questions can also test the students' ability to apply knowledge. Multiple choice questions consist of a "stem" that poses the problem and a list of three to five possible answers. The student must select the one

correct answer from the list. The true or false question is a variation of the multiple choice question.

Good multiple choice questions are difficult to prepare. These guidelines will help you overcome many of the shortcomings of multiple choice questions.

Design the question to measure a learning objective.

Include only one issue in each question.

Use clear, simple language in the stem.

Give as much information as possible in the stem.

Present the stem in positive form.

Make all incorrect choices plausible.

Do not fill in the fifth choice with "all of the above."

Multiple choice questions are easy to grade. If the questions are well-written, controversy rarely arises about the correct answers. Here are some examples of multiple choice questions.

A disease which causes redness of the eye due to chlamydia infection is:
a. Trachoma
b. Conjunctivitis
c. Iritis
d. Corneal ulcer
e. Glaucoma

T F The fetus cannot deliver in a transverse position.

c. Case study questions

Case study questions are a form of short answer questions. The student is given information about a problem. He is expected to analyze the information, draw conclusions, and make decisions.

Here is an example of a case study question.

> A forty-year-old woman complains of feeling tired and sleepy. She is too weak to do her daily work and wants only to sleep. She has been very constipated. Her menstrual periods are regular, but for the last four months they have lasted longer and bleeding has been heavier than usual. Her last menstrual period was two weeks ago.
>
> The patient's vital signs are normal. Her face is puffy, and she seems disinterested in her surroundings. She moves very slowly. Her speech is slightly slurred. The patient reports that her hair breaks off easily. Her thyroid gland is slightly enlarged and smooth when palpated. Her skin is dry, but no thickening can be detected. Further examination of her neck, chest, heart, arms, and legs reveals nothing abnormal.
>
> a. What is your diagnosis?
>
> b. What patient care would you provide for this woman?

Of the three types of questions, case study questions are the most useful for determining a student's ability to apply knowledge. They are also the most difficult to prepare. You develop case study questions from reports of patients' problems.

Assessing Skills

Skill assessment is the key to evaluating competence in a competency-based training program. Only by assessing students' performance can the instructors determine if the students are acquiring the necessary skills to do their jobs after graduation. Skill checklists assess the students' skill in performing procedures. There is one skill checklist for each procedure that the students learn in their training. A skill checklist lists the essential steps in the procedure. The students are instructed to use the skill checklists as they learn and practice procedures. The instructors and field supervisors use the same checklists to monitor the students' competence in performing the procedures during their practice experience. The supervisor observes the student and rates him on each

step of the procedure. The supervisor shares his comments about performance a suggestions for improvements with the student.

The students learn and master basic skills early in the program. Evaluation of higher level skills takes place as students have the time and the proper setting in which to practice. The continuous monitoring process enables the instructors to identify and help students who are lagging in their skill development.

Each checklist has a rating scale. The observer rates each step in the procedure on a scale of 1 to 5, with 1 indicating inadequate performance and 5 excellent performance. A rating of 3 indicates acceptable performance. A student must receive a rating of at least 3 on each of the steps before he is considered competent.

Records of students' progress in skill development are kept ir the students' files. A log sheet listing all required skills allows the instructor to see at a glance how the student is progressing through the training program.

Prepared: 25 January 1990

Source Document: MEDEX Training Program Development: Training Process Manual, 1983.

TOT SESSION PLAN

Session: 1 Title: Introduction to TOT Trainer: Purdin

Date: 19 May 1990 Time: 8 to 10 am

Objectives: By the end of the session the participants will:
- learn more about one another
- identify their expectations for the TOT workshop
- list six ways people learn
- define learning
- explain the concept of competency-based training
- experience at least 5 non-formal education techniques

TIME	ACTIVITIES	RESOURCES
10 min	1. Warm-up. Light a match and talk about self while it burns.	matches
10 min	2. Expectations. Brainstorm: What do you expect from this workshop? (Note comments; save for last session.)	chart 1
5 min	3. Issues. We will make notes on this chart to discuss later.	chart 2
5 min	4. Schedule. This is the schedule for the week.	handout 1
10 min	5. Objectives. On the schedule is the title for each session. I have developed a detailed plan for each session which begins with a list learning objectives. Objectives.	chart 3
10 min	6. Brainstorm. How do people learn? Who do they learn from? (stories, observing, trial & error; parents, teachers, siblings, peers, elders)	board
20 min	7. How do we measure learning? (Participant reads the story of Abdul Sayed.) Did Habiba learn something? How do we know? (changed behavior) What is the job of the teacher? (to help students learn)	story chart 4
20 min	8. We are here to develop training skills. We support competency-based training. What is competency-based training? We will use active learning in the work-shop so you can experience the techniques.	handout 2

TIME	ACTIVITIES	RESOURCE
10 min	9. Change Theory. As teachers we are agents of change. There have been studies of how people change. They always go through 3 steps--disorganization, change, reorganization. You must be prepared for resistance to change. It's normal.	board
10 min	10. We have talked about how people learn, competency-based training, change theory, and how to measure learning. We want to use active learning methods called non-formal education techniques. Formal education=lecture. NFE=everything else. Most people teach as they were taught. For us to change to NFEs may not be easy. How can we demonstrate that we have learned something in this workshop? (use NFEs in our teaching)	handout
10 mn	11. Summary a. What did we talk about in this session? b. Did we meet our objectives? c. What NFEs did you experience? (warm-up, brainstorm, discussion, charts, handouts, story)	board

The Story of Abdul Sayed

One day in October, Habiba brought her 2-year-old son, Abdul Sayed, to the clinic. The boy had been having watery stools for three days. Habiba had refused to give him any food or water to prevent him from having more diarrhea. Abdul Sayed was moderately dehydrated and very unhappy. Khalil, the paramedic, showed Habiba how to make ORS and told her to give it to Abdul Sayed whenever he had a watery stool.

In November, Habiba brought Abdul Sayed back to the clinic. This time he had been having diarrhea for four days, but he was only slightly dehydrated. Habiba had started giving ORS after the first watery stool.

حکایت بازگشت عبدالشهید

یکروز دریاد اکتبر حبیب بشر ده ساله خود عبدالشهید را به کلینیک آورد که بیشترش از مدت چهارروزه بشدت مواد غایطه آبکین داشت حبیب در اول غذا و آب به طفل خود داری کرده بود باین خاطر که سادا بشکال بلغل را دریاد نخشد. عبدالشهید بقسم اوبتا دیجایدریشن شده و بشیار ناخوش بنظر بود. خلیل پارامدیک به حبیب شان داد که حیاتی ORS میباشد و برای او گفت که هرقدریکه عبدالشهید مواد غایطه آبکین بشکل داشت درعین زمان ORS بدهد.

دریاد دوباره حبیب عبدالشهید را دوباره به کلینیک آورد. این مرتبه وزن چهار روز پیش طرف عبدالشهید بشکال بود اما بشیار کم دیجایدریشن شده بود. حبیب به دادن ORS شروع کرده بود بعد از دو روز مواد غایطه طفل آبکین شده بود.

Competency-Based Training

Competency-based training focuses on the development of essential, job-related knowledge and skills. This is accomplished by:

- defining clear objectives before training begins
- providing learning opportunities that help the students acquire job-related knowledge and skills
- routinely evaluating and correcting the performance of each student until he perfects his knowledge and skills

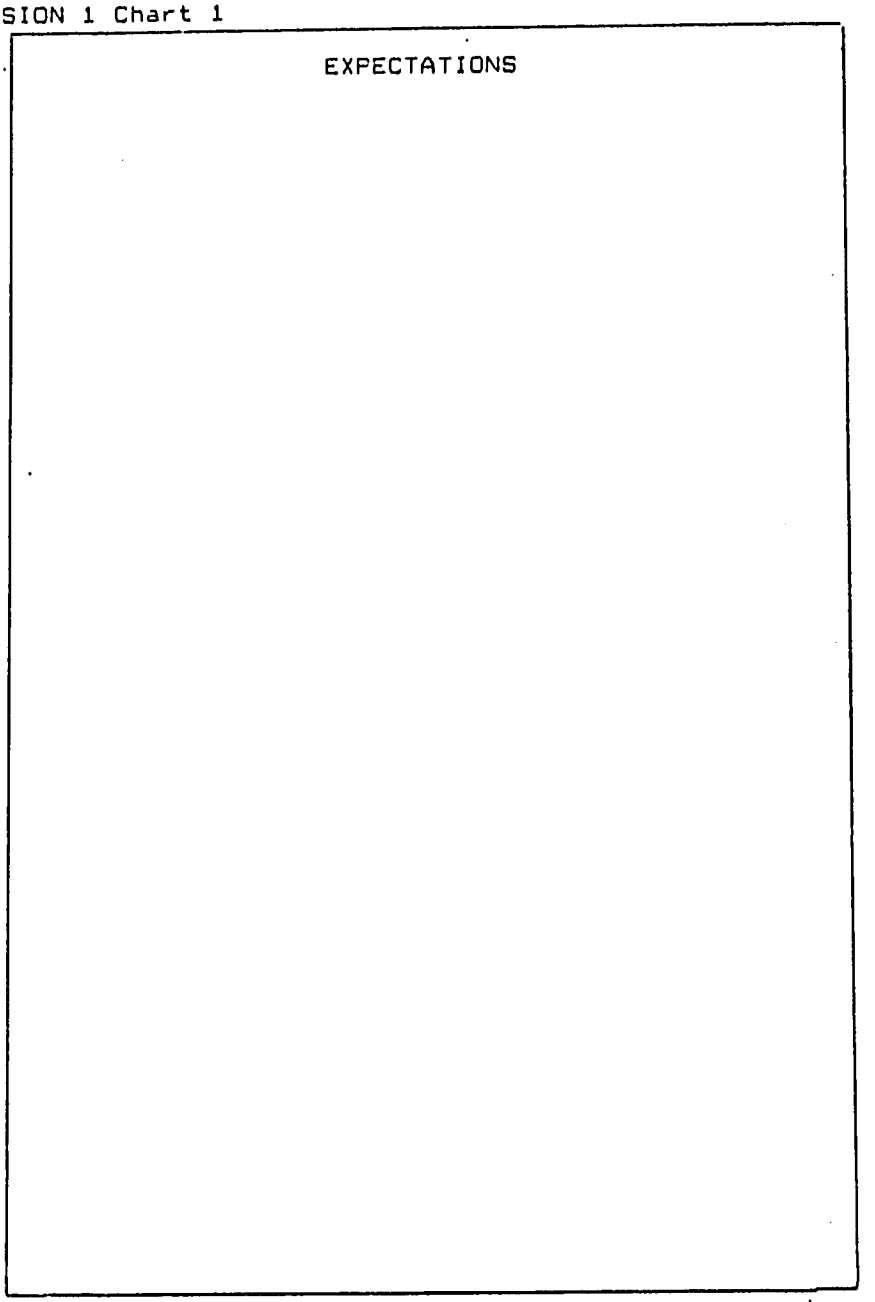
Competency-based training differs from more conventional training approaches in both its content and its evaluation process. The content of a competency-based training curriculum relates directly to job performance.

The skills and knowledge taught must help the graduate perform his job. In contrast, conventional training approaches are designed to establish a broad knowledge base. The student draws on this knowledge, or a portion of it, to do his job. The knowledge may or may not be relevant to the job requirements.

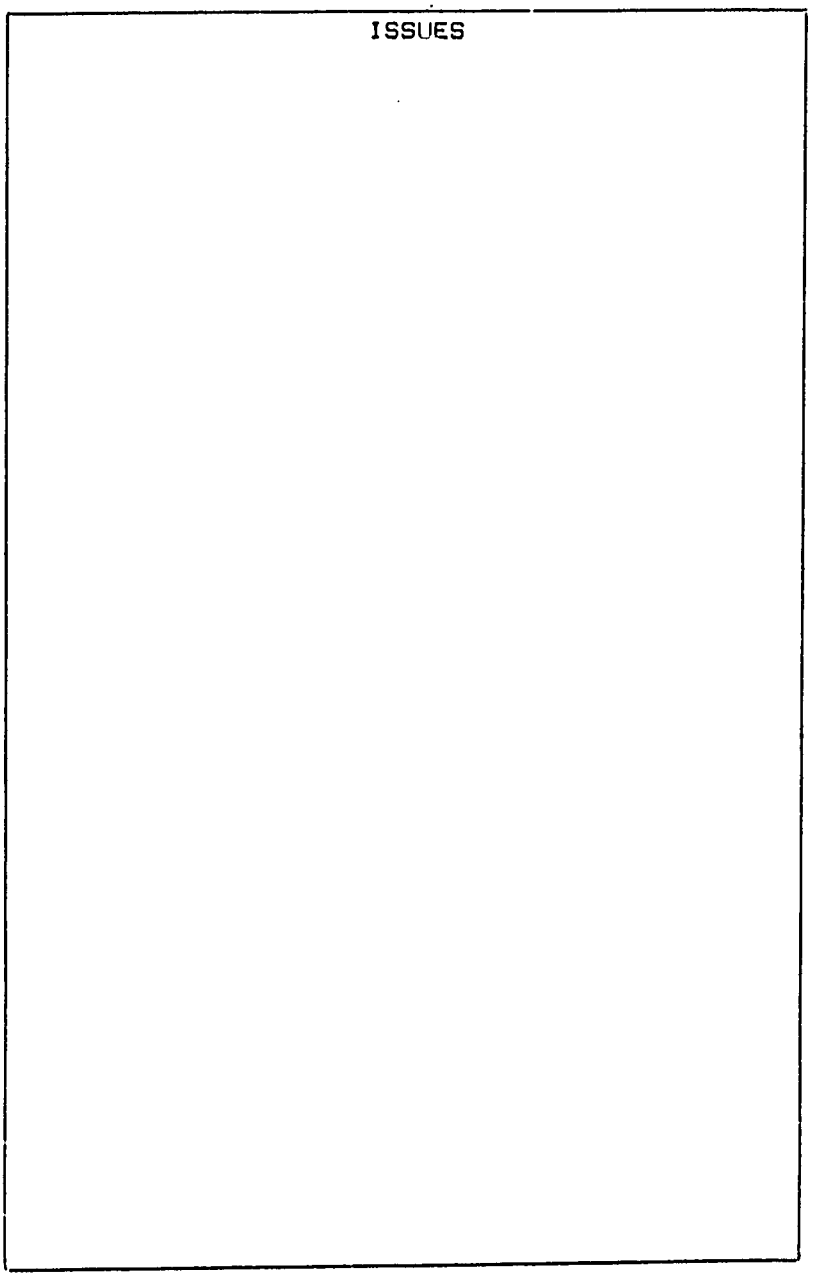
In a competency-based training program, student evaluation is based on training objectives. The student knows the objectives of training as he begins each sequence of the program. The objectives guide the student through the training process. If a student meets the objectives, he goes on to the next phase of training. If he does not meet the objectives, he practices further and is evaluated again. Some students achieve the training objectives sooner than others. No student completes the program, however, until he achieves the objectives.

The lecture method of teaching is the best way to transfer the teacher's notes to the students' notebooks without ever passing through their minds.

TOT SESSION 1 Chart 1



TOT SESSION 1 Chart 2



TOT SESSION 1 Chart 3

TOT Session 1 Introduction to TOT
Objectives: By the end of the session
the participants will
- learn more about one another
- identify their expectations for the TOT workshop
- list six ways people learn
- define learning
- explain the concept of competency-based training
- experience at least 5 non-formal education techniques

TOT SESSION 1 Chart 4

How do we measure learning?

We observe a change in behavior.

Role Play Character #1

The Formal Teacher

You will be on stage for 5 minutes.

You are a formal teacher who uses the lecture method of teaching. You always use very large medical words and speak very fast. You do not allow any questions or talking by the students while you are teaching.

- Arrange the students in neat rows all facing the front. Make sure they are quiet and orderly.

- Begin the lecture exactly on time. Talk rapidly in a dull voice. Stand stiffly in front of the class. If some students come late, scold them!

- If any student does not pay attention, or whispers to a neighbor, or begins to go to sleep, BANG on the table, scold the student angrily. Then continue your lecture.

- Act as if you know it all, as if you think the students are stupid, lazy, rude, and worthless. Take both yourself and your teaching very seriously.

Here is what you should say:

The buccal cavity, or mouth, is the anterior -- that is to say proximal -- portion of the alimentary canal, situated in the inferior portion of the face and circumscribed by the lips, cheeks, palatoglossal arch, uvula, oral pharynx, and tongue. -- YOU! I MUST ASK YOU NOT TO SPEAK DURING CLASS. HAVE YOU NO MANNERS? -- The teeth are each one of a set of hard, white structures projecting into the buccal cavity from the alveolar bone of the maxilla and mandible and utilized for the mastication of food. There are two sets of dentition -- deciduous and permanent -- PAY ATTENTION; DO NOT SLEEP IN CLASS! -- These are composed of inferior and superior incisors, canines, premolars, and molars. Caries is the molecular decay of enamel, dentine, and pulp, producing discoloration, chronic inflammation of the periosteum and necrosis of the medial nerve leading to -- YOU MUST LEAVE THE ROOM IF YOU INSIST ON TALKING IN CLASS -- leading to a pyogenic abscess on the osseous tissue contiguous with the apex of the root and precipitating a systemic infection.

Role Play Character #2

The Non-Formal Trainer

You will be on stage for 5 minutes.

You treat the students in a relaxed and friendly way--as equals. You will teach the same information as the formal teacher but in a different manner

- Ask the students to sit in a circle so they can see each other.

- Try to draw information out of the students from their own experience by asking them questions.

- Use words the students understand.

- Use locally available teaching aids. Invite a young child to class so the students can see the difference between baby teeth and adult teeth. Have students look in each others' mouths for cavities. Pass around some rotten teeth that were pulled at the dental clinic. Let students smash the teeth open with a rock, so they can see the different layers and how decay spreads inside a tooth. Ask someone to draw the inside of a tooth on the blackboard.

- Encourage students to relate what they have seen and learned to real needs and problems in their own communities. Discuss what actions they might take.

TOT SESSION 2 Handout 1

WHAT DO YOU THINK OF THE TEACHER WHO

A. wears clean and tidy clothes?

B. always arrives on time?

C. prepares thoroughly for each session?

D. shows that s/he is very knowledgeable about the subject by using all the technical words?

E. is a very important person and is very busy? has to hurry away from teaching sessions to do other work?

F. never smiles or jokes, because learning is a very serious business?

G. always praises students' work, however bad it is?

H. talks to students and finds out what their personal interests and ambitions are?

I. asks students to comment on the teaching sessions so that the sessions can be improved?

J. ignores the comments students make about the lessons?

K. requires the students to do work of a high standard?

SKILL CHECKLIST
Performing and Recording a Child Physical Examination

This checklist has two purposes:

1) Students should use it as a guide for checking their own skills or other students' skills.
2) Supervisors should use it when they evaluate how well students perform and record a child physical examination.

After observing a student, enter a rating in the appropriate column.

Rating: 1 = Inadequate
2 = Needs improvement
3 = Satisfactory
4 = Above average
5 = Excellent

When performing and recording a child physical examination:	YES	NO	RATING	COMMENTS
1. Arrange all of the equipment on a table within reach				
2. Prepare the child for the examination				
3. Examine the general appearance. Include: State of health State of nutrition Behavior Mental state				
4. Check development skills. Include: Social skills Physical skills Language skills				
5. Examine the skin				

TOT SESSION 2 Handout 3

Checklist for Training Page 1

[Score presenter on each behavior. Comment on ratings below 3. Give examples. Offer suggestions.]

Rating: 1 = inadequate
2 = needs improvement
3 = satisfactory
4 = above average
5 = excellent

The trainer:	Rating	Comments
1. Speaks and writes clearly.		
2. Uses active learning / non-formal education techniques. (List)		
3. Encourages participation by asking questions and presenting problems.		
4. Uses imaginative teaching aids.		
5. Uses examples and stories to illustrate ideas.		
6. Relates the subject to the student's work.		
7. Uses the local language.		
8. Shows enthusiasm.		
9. Treats the students with respect.		

Checklist for Training Page 2	Rating	Comments
10. Draws shy students into discussions.		
11. Lets students help each other learn.		
12. Prepares teaching plans and materials in advance.		
13. Leaves out what is not important or too detailed.		
14. Covers the material that was planned.		
15. Knows the subject adequately.		
16. Emphasizes and repeats the most important points.		
17. Provides enough review and practice.		
18. Evaluates whether students will be able to use their learning in real life situations.		
19. Shows honesty and openness.		
20. Responds to student errors with positive criticism and patience.		

TOT SESSION 2 Chart 1

TOT SESSION 2 Trainer Characteristics
Objectives: By the end of the session the participants will:
- list at least 5 characteristics of a good trainer
- identify 6 ways a trainer demonstrates his concern for students
- discuss 4 roles of a trainer
- describe how to use a checklist
- identify 4 uses of a checklist
- practice using a checklist to evaluate a trainer

TOT SESSION 2 Chart 2

WHAT DO YOU THINK OF THE TEACHER WHO

A. wears clean and tidy clothes?

B. always arrives on time?

C. prepares thoroughly for each session?

D. shows that s/he is very knowledgeable about the subject by using all the technical words?

E. is a very important person and is very busy? has to hurry away from teaching sessions to do other work?

F. never smiles or jokes, because learning is a very serious business?

G. always praises students' work, however bad it is?

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3. Examine the general appearance. Include: State of health State of nutrition Behavior Mental state				
4. Check development skills. Include: Social skills Physical skills Language skills				
5. Examine the skin				

TOT SESSION PLAN

Session: 3 Title: Feedback Trainer: Purdin

Date: 19 May 1990 Time: 2 to 4:30 pm

Objectives: By the end of the session the participants will
- practice one team building exercise
- identify three roles wherein it is appropriate to give feedback
- define feedback
- list at least 8 rules for giving feedback
- list at least 8 rules for receiving feedback
- practice giving feedback

TIME	ACTIVITIES	RESOURCES
30 min	1. Cooperative Squares How did you feel about the exercise? Why did we do this exercise? What can be learned from this activity? Why is cooperation important? Is this more meaningful than a lecture on team-building?	chart 1 game
5 min	2. Objectives	chart 2
5 min	3. Discussion: Who should give feedback? (teachers, students, co-workers, peers, boss)	
15 min	4. Brainstorm: Feedback. From these words let's write a definition of feedback.	board chart 3
10 min	5. Why do we give feedback? Do you want to receive feedback? How many people are involved when feedback is given?	
15 min	BREAK	
20 min	6. Two Groups. List at least 8 Rules for giving Feedback and at least 8 Rules for receiving Feedback.	charts 4a,4b
10 min	8. Presentation of rules. Discussion	
15 min	9. Groups of Three. Practice giving and receiving feedback. Rotate role of giver, receiver, observer. Observer describes rules obeyed/broken.	

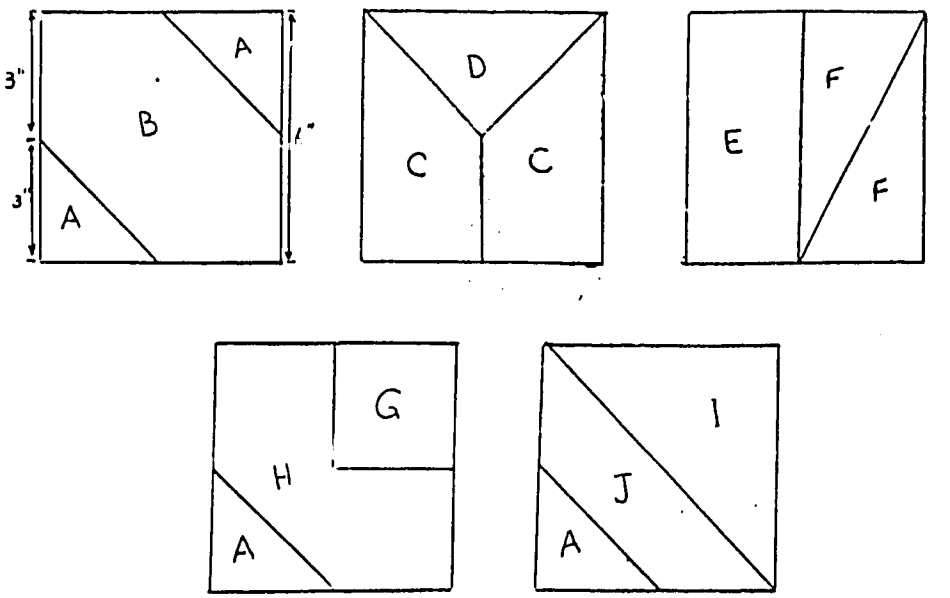
IME	ACTIVITIES	RESOURCES
nin	10. Summary: People want to know how they are doing. We should praise the good things and offer suggestions for improvement. Did we meet our objectives? What NFE's did we practice?	

Cooperative Squares Game

[Prepare these materials and put them into envelopes before the session begins. Make a complete set of Cooperative Squares for each grou of five players.]

A set of cooperative squares has fifteen pieces. Use the diagram an instructions below to make a set of six-inch by six-inch cardboard cards.

To make the cooperative squares, first cut the cardboard into six-in squares. Draw lines on the squares making three pieces as shown in the diagram. label the pieces as shown. Now, cut each square into its three pieces. All pieces marked with the same letter should be the same shape and size.



Now, number five envelopes one to five. Each envelope will contain specific pieces.

Put pieces lettered:	into envelope numbered:
I, H, and E	1
A, A, A, an C	2
A and J	3
D and F	4
G, B, F, and C	5

Put the five envelopes into one large envelope. You will give the ;am this large envelope with five smaller envelopes inside.

Introduce the activity by explaining that the game they are about to lay is a learning experience that will be discussed later. Pass a large ıvelope with five smaller envelopes inside to each team. Tell the ırticipants, "Each member of your team has pieces of cardboard in an ıvelope. When I say 'begin', form five perfect squares of equal size wi ıe separate pieces. Your task will not be complete until each of you ha: ı front of you a perfect square the same size as those before the other)ur players on the team. Here are the rules of the game:

Team members may not speak.

Team members may not signal others to give them a piece.

Team members may, however, give p ıces to other players on their tea

Rules for Cooperative Squares

Team members may not speak.

Team members may not signal others to give them a piece.

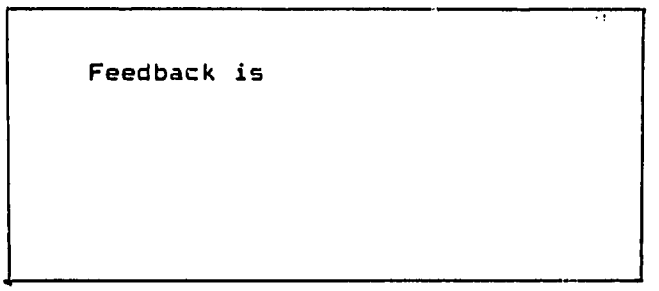
Team members may, however, give pieces to other players on their team.

No one's task is complete until each player on the team has a perfect square the same size as the others on the team.

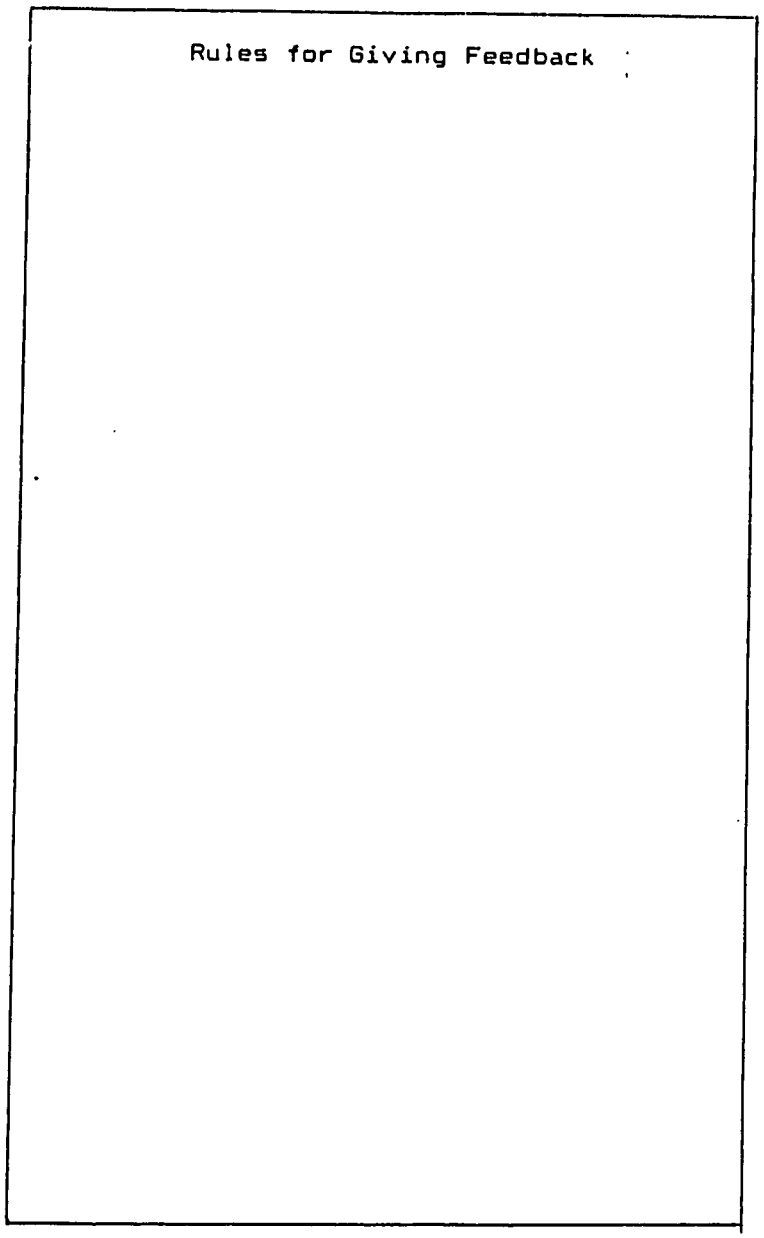
TOT SESSION 3 Chart 2

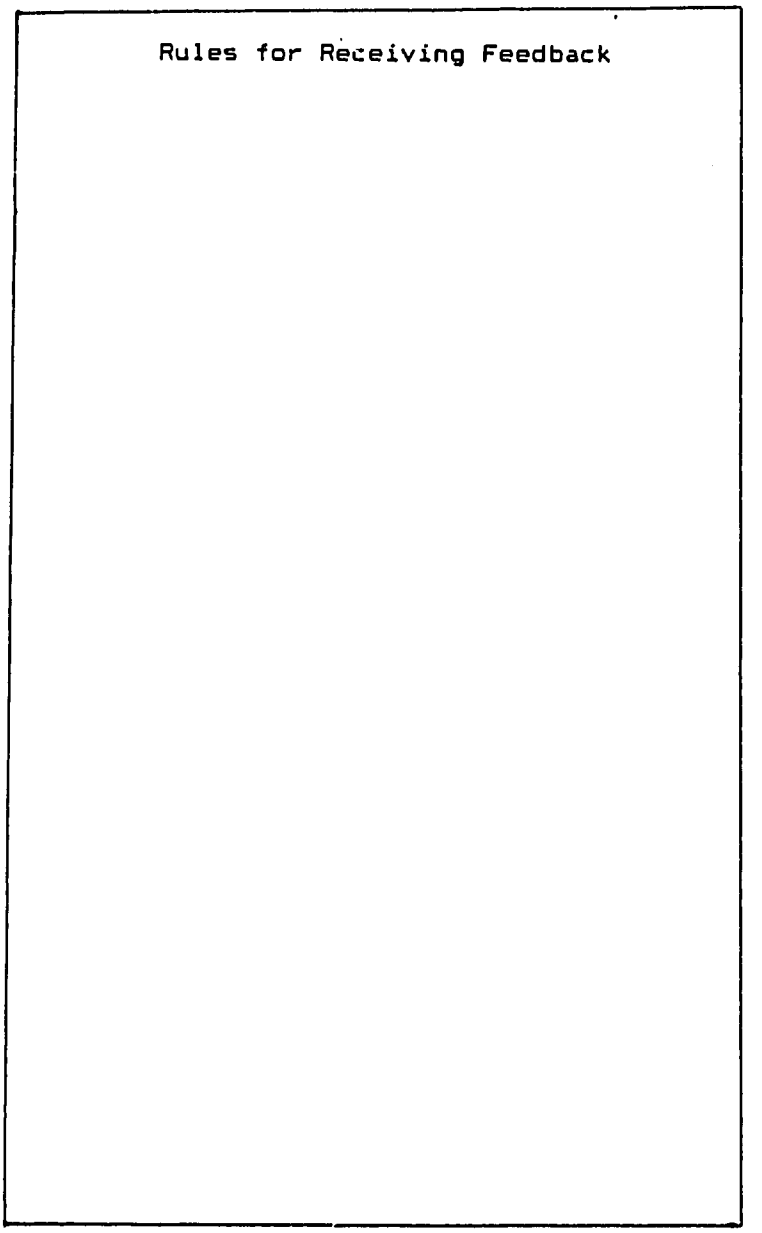
TOT SESSION 3 Feedback
Objectives: By the end of the session the participants will:
- practice one team building exercise
- identify three roles wherein it is appropriate to give feedback
- define feedback
- list at least 8 rules for giving feedback
- list at least 8 rules for receiving feedback
- practice giving feedback

TOT SESSION 3 'Chart 3



TOT SESSION 3 Chart 4a




Rules for Receiving Feedback

TOT SESSION PLAN

Session: 4 Title: How to Teach Attitudes

Trainer: Purdin Date: 20 May 1990 Time: 8:00 am to 09:30 am

Objectives: By the end of the session the participants will:
- discuss how attitudes affect actions
- define attitude
- list at least 4 good paramedic attitudes
- identify 5 methods for teaching attitudes
- describe the use of slides to teach attitudes

TIME	ACTIVITIES	RESOURCES
15 min	1. Discussion: Listen to this situation: You are a health care worker scheduled to assist at a vaccination clinic in 5 minutes. Just as you are ready to get into the vehicle, a woman arrives with a sick child. 1. What will you do? 2. Why? 3. What attitudes are demonstrated?	board
5 min	2. Introduction. Many health educators say that the attitudes learned during training are the most important part of the training. Today's objectives are:	chart 1
	An attitude is a tendency to behave a certain way; a demonstration of preference, choice, or value.	chart 2
10 min	3. Turn to your neighbor. Describe a paramedic you know who has a good attitude. Tell the group one thing your partner identified. (treat everyone equally, prevention is better than cure, cleanliness is preferred, medicine can be dangerous...)	chart 3
5 min	4. Attitudes are not easily or quickly taught. If you explain/teach students that they should respect their patients, how can you know if they have adopted that attitude? Attitudes are vague, hard to define or explain. But if the student develops good attitudes while in training, these will support him in doing his job correctly when in the field without close supervision. Attitudes are generally learned over time through experience.	

TIME	ACTIVITIES	RESOURCES
	There are 5 general methods which can be used to teach attitudes: - provide information - provide models - provide direct experience - provide opportunities for discussion - role-playing exercises	
25 min	4. Providing Information to Shape Attitudes. (Explaining that smoking causes Ca.) Providing models: (The teacher as a role model. The models in advertising) Providing Experience. (Seeing the consequences of poor care.) Providing Discussion. (Helps students clarify their own ideas. Groups of 7-8 are best. Teacher should say little. Recall the situation at the beginning of this session.) Role Playing. (One is a father who has brought his sick child to the clinic. The other student is a health worker who diagnoses undernutrition as one of the child's problems. Role play nutrition counselling.)	chart 4
20 min	5. Slide Show: Charting Growth. How could this slide show affect students' attitudes?	slides projecto stabiliz
10 min	6. Summary: What did we discuss in this session? Did we meet our objectives? What NFEs did we use?	handout

ABOUT ATTITUDES

* Attitudes determine how a person tends to behave.

* Attitudes are difficult to define precisely.

* It is difficult to find out what a person's attitudes are.

* Attitudes are very important.

* It is essential that Primary Health Care workers have attitudes which are consistent with the philosophy of PHC.

* All experiences tend to shape attitudes--not just the experience which are designed to change attitudes.

Some attitudes appropriate in Primary Health Care include:

- a desire to continue learning throughout life

- respect for the convenience, comfort and beliefs of all patient

- a desire to share knowledge and skills

- an eagerness to overcome difficulties

- a willingness to share in the whole range of community activities

- a desire to be of service to the community and to individuals within the community

- a desire to co-operate with other workers in the community

*Attitudes can be shaped by teachers who:

- provide information

- provide a model or example

- provide experiences

- encourage discussions

- use role play exercises

About Attitudes~~

No matter what we say,
It's how we act
That people will
remember.

HOW TO TEACH ATTITUDES

An attitude is a tendency to behave in a certain way. For example a person who has an attitude of thoroughness will generally keep full and correct records of his work.

Attitudes like this are not developed easily. The teacher must do more than say, "You should be thorough in keeping records."

Attitudes can be shaped by:

- providing the background information
- providing a model or example
- providing experiences
- encouraging discussion amongst the students
- using role-playing exercises

The Importance of a Solid Base in Curative Skills
[from Helping Health Workers Learn by David Werner]

The ability to attend the sick is one of the most important skill health worker can learn. This is because:

- Curative medicine answers a strong felt need. Most people show far more interest in curing their ills than in preventing them--at least at first.

- A health worker who is an effective healer will win people's confidence and cooperation more readily--even for preventive measures.

- Early, safe, low-cost treatment by people in their own homes is an essential part of prevention. It keeps many minor problems from becoming severe.

- Attending the sick provides a key opportunity for health education that relates to the family's immediate problems and concerns.

- Only when health workers are well versed in curative medicine, including its risks and limitations, can they help people overcome common misunderstandings about modern medicine. (Training health workers only in 'prevention' can actually lead to greater misuse, overuse, and mystification of medicine.)

Appropriate curative medicine is a key part of prevention.

Treatment as a Door to Prevention

Many health workers have found that the 'clinical consultation' i of the best opportunities to talk about preventive measures. Some fin this more effective than organized health talks in small groups becaus

- it is more immediate and personal,

- the sick person and his family are very much concerned with the illness in question,

- many people come for treatment who might not come to health talks.

A health worker who can diagnose and treat, or help others to diagnose and treat many of their own health problem has many more opportunities for health education.

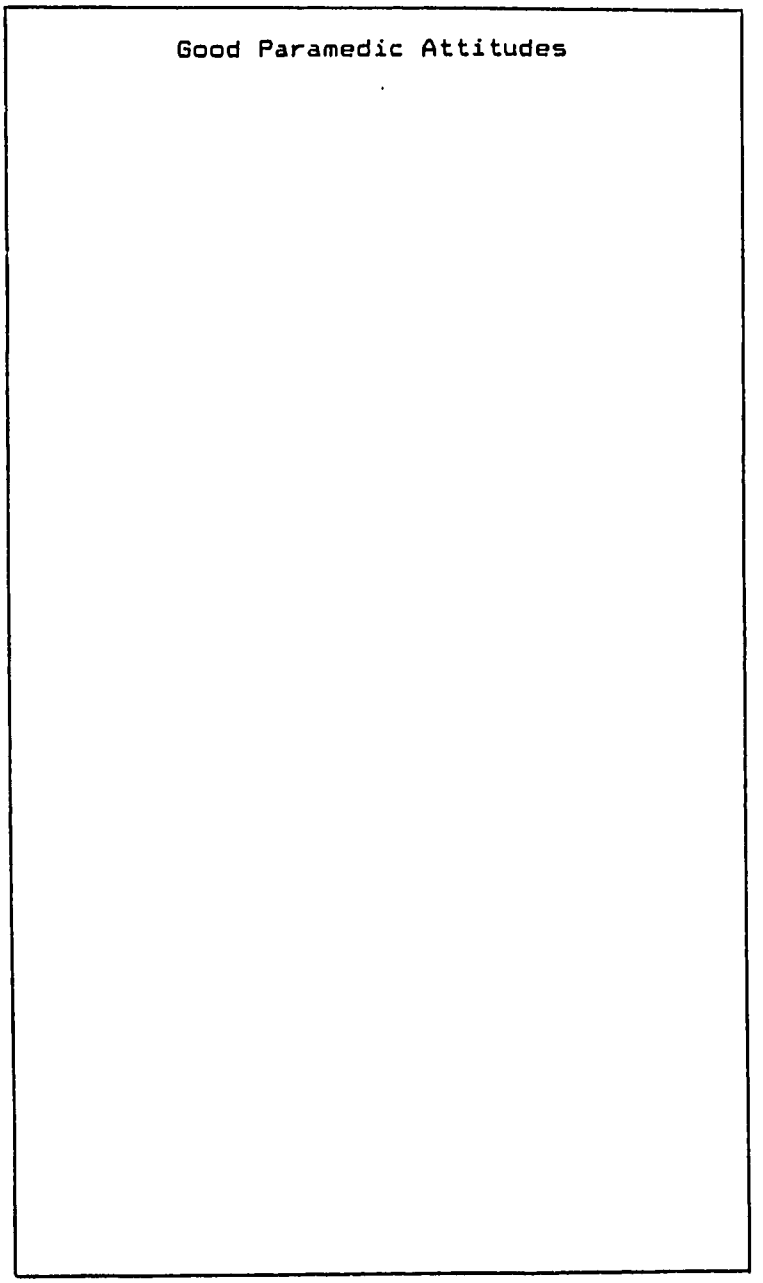
TOT SESSION 4 Chart 1

TOT SESSION 4 How to Teach Attitudes
Objectives: By the end of the session the participants will:
- discuss how attitudes affect actions
- define attitude
- list 4 good paramedic attitudes
- identify 5 methods for teaching attitudes
- describe the use of slides to teach attitudes

TOT SESSION 4 Chart 2

An Attitude is a Tendency to
Behave in a Certain Way
--A Demonstration of Preference,
Choice, or Value.

TOT SESSION 4 Chart 3



Five General Methods
Which Can Be Used To Teach
Attitudes

- providing information
- providing examples or models
- providing direct experience
- providing opportunities for discussion
- role playing exercises

TOT SESSION PLAN

Session: 5 Title: How to Teach Knowledge

Trainer: Purdin Date: 20 May 1990 Time: 10:00 am to 11:00 am

Objectives: By the end of the session the participants will:
- list at least 6 sources of knowledge
- identify 8 steps to follow when giving a lecture
- describe 5 guidelines used in developing teaching materials

TIME	ACTIVITIES	RESOURCES
10 min.	1. Warm Up: Raise your hand if you know the answer. What is the capital of USSR, Afghanistan, Iran, Canada, India, Botswana, Zimbabwe, USA? Why do we know some and not others? It is only necessary to teach the knowledge which is useful. Objectives.	board chart 1
10 min.	2. Brainstorm: Sources of information. (teachers, books, films, posters, experts, practitioners, models, experience, surveys, patients, handouts...)	chart 2
30 min.	3. Lecture: How to Teach Knowledge: I. Planning What to Teach A. Identify themes to be covered B. Put themes in order C. Decide how much detail to include 1. What facts must be remembered. 2. What facts add interest. 3. What facts should be recorded for reference. II. Giving a Lecture A. Get their attention--why is this important, story, experience B. Give an overview of what will be covered--objectives, outline, plan C. Test how much they already know D. Present the information--lecture, handouts, read aloud, student teaching E. Summarize the major points F. Test their knowledge G. Give them an exercise or assignment	chart 3 handout

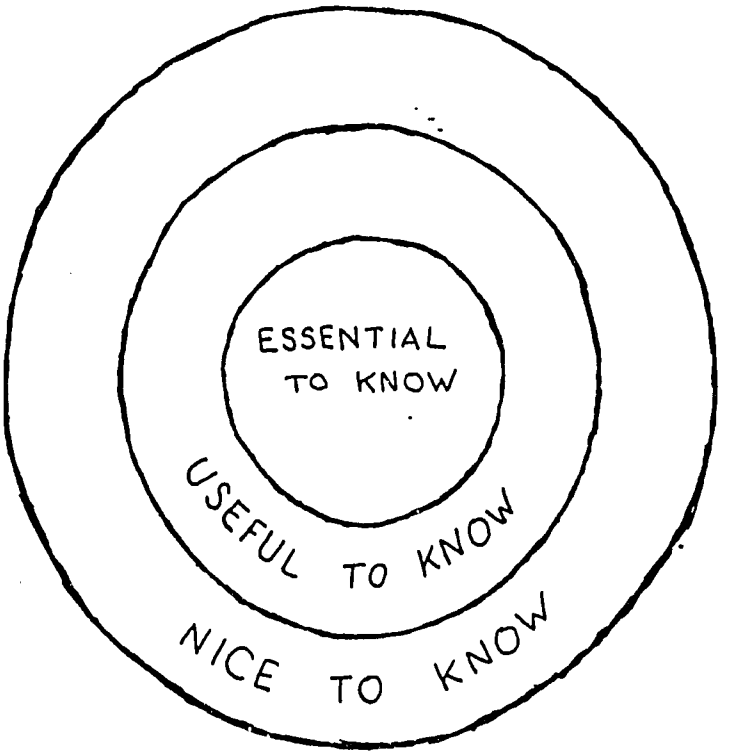
TIME	ACTIVITIES	RESOURCES
	H. How to speak in the lecture 1. Speak loudly enough 2. Speak clearly 3. Keep it simple 4. Sound interested	
	III. Writing and Evaluating Teaching Materials	
	A. Decide on the objectives--what does student need to know to do the job?	
	B. Include all <u>necessary</u> information	
	C. Leave out <u>unnecessary</u> information--you don't have to prove you know a lot. You have to help them learn what they need to know.	
	D. Give information in a logical order	
	E. Evaluate what you have taught 1. How will the student use the information? 2. Did you teach what the students need? 3. Did you meet the objectives? 4. Did the students pass the test?	
5 min.	4. Summary: Did we meet our objectives? What NFEs did we use this session?	

HOW TO TEACH KNOWLEDGE

I. Planning What to Teach
   A.
   B.
   C.
      1.
      2.
      3.

II. Giving a Lecture
   A.
   B.
   C.
   D.
   E.
   F.
   G.
   H.
      1.
      2.
      3.
      4.

III. Writing and Evaluating the Teaching Materials
   A.
   B.
   C.
   D.
   E.
      1.
      2.
      3.
      4.

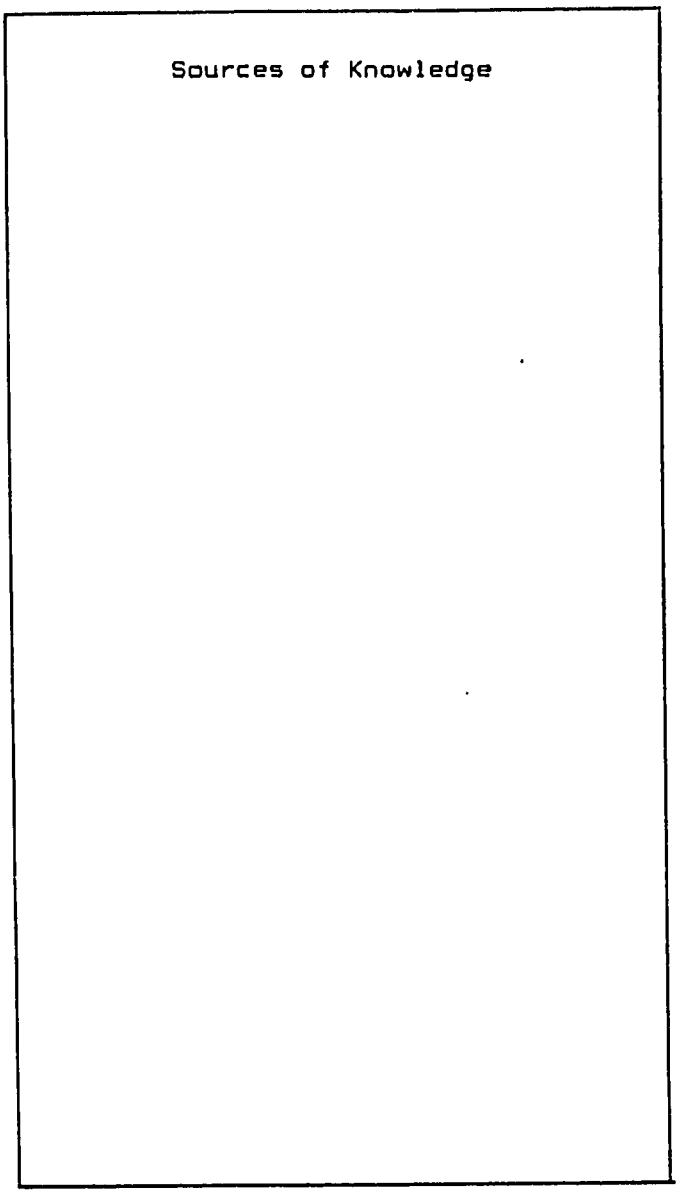


AIM AT TEACHING WHAT IS IMPORTANT

OT SESSION 5 Chart 1

TOT SESSION 5 How to Teach Knowledge
Objectives: By the end of the session
the participants will:
- list at least 6 sources of knowledge
- identify 8 steps to follow when giving a lecture
- describe 5 guidelines used in developing teaching materials

TOT SESSION 5 Chart 2



TOT SESSION 5 ' Chart 3

HOW TO TEACH KNOWLEDGE

I. Planning What to Teach
   A.
   B.
   C.
      1.
      2.
      3.

II. Giving a Lecture
   A.
   B.
   C.
   D.
   E.
   F.
   G.
   H.
      1.
      2.
      3.
      4.

III. Writing and Evaluating the Teaching Materials
   A.
   B.
   C.
   D.
   E.
      1.
      2.
      3.
      4.

Go in search of Your People:
Love Them;
Learn from Them;
Plan with Them;
Serve Them;
Begin with what They have;
Build on what They know.

But of the best leaders
when their task is accomplished,
their work is done,
The People all remark:
"We have done it Ourselves."

TOT SESSION PLAN

Session: 6 Title: How to Teach Skills Trainer: Purdin

Date: 20 January 1990 Time: 11:00 am to 12:00 noon

Objectives: By the end of the session the participants will
- practice using a demonstration to teach a skill
- describe 3 types of skills paramedics need
- list three steps in helping a student learn a skill
- describe 4 NFEs which can be used to teach skills

TIME	ACTIVITIES	RESOURCES
15 min	1. Warm-Up: How to make a bug catcher.	paper squares
5 min	2. Introduction: Objectives One of the things we teach is skills. There are three types of skills used by health care workers. (communication, hand, decision-making) How did you learn the skill of speaking? (practice)	chart 1 chart 2
5 min	3. There are three steps in teaching a skill. - Describe the skill. - Demonstrate the skill. - Arrange opportunities for the student to practice.	board
5 min	4. Describe the Skill: Explain why the skill is important; why the student needs to know how to do it; when to use it. The description can be done via video, lecture, etc. It is helpful to give the students written instructions: handout, reference, skills checklist.	
5 min	5. Demonstrate the Skill: Sometimes demonstration is done at the same time as description. Here are some guidelines for demonstration: It must be correct (practice, check equipment, use what the students will use) It must be visible (every student needs to see; repeat for every few students) Explain it again (a handout is helpful)	chart 3
20 min	6. Opportunities for Student Practice: Each student must practice. The teacher should give feedback so the students learn do it right. There are 4 NFEs which are especially helpful in giving students practice for skill-building:	chart 4

TIME	ACTIVITIES	RESOURCES
	A. Role Playing--this is very good in developing communication skills (we also said it was a useful technique for teaching attitudes) Remember the example of the two students who played doctor and parent talking about an undernourished child.	
	B. Projects--outside the class students can do community surveys. These projects develop communication and decision-making skills. They help the students work independently under the supervision of the instructor.	
	C. Simulations--this allows students to practice without hurting people. (injecting oranges, IV arm, goat lab, birthing model, splinting one another)	
	D. Job Experience--students work along with the staff. (start by observing, then performing while being instructed, then performing under supervision, then performing with occasional checking)	handout
5 min	7. Summary: What did we do in this session? Did we meet our objectives? What NFEs did you experience?	handout

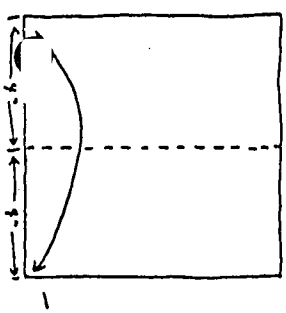
How to Make a Bug Catcher

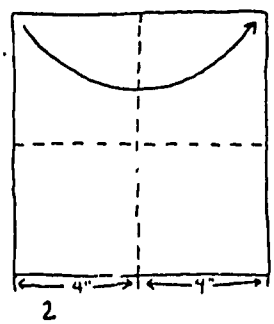
Prepare 15 eight-inch-squares of plain paper.

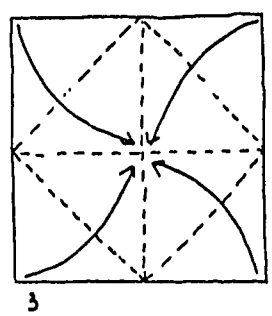
Follow the illustrations to fold the paper into a bug catcher.

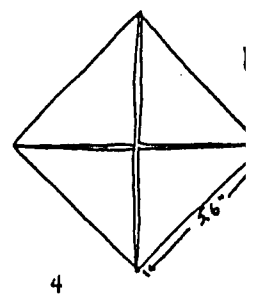
Take a completed bug catcher to class and show the students what you will teach them to make. Follow the steps in demonstrating a skill. Describe it. Demonstrate it. Talk them through a return demonstration.

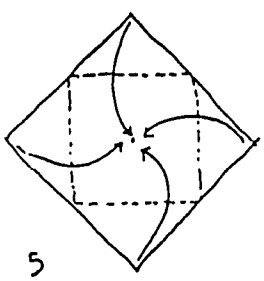
After the exercise explain to them that they have learned this skill through non-formal education.

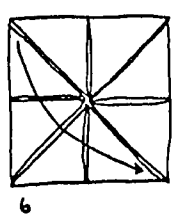












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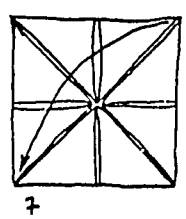
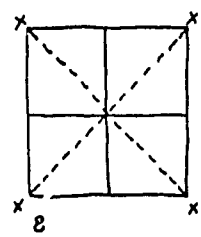
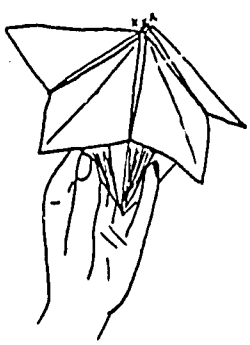






IT SESSION 6 Handout 1 (From Helping Health Workers Learn)

Role of the Instructor in the Clinical Situation

T e role of the clinical instructor--whether an experienced health
rker, a doctor, or someone else--is of key importance. The instructor
eds to do far more than question, examine, and treat the patient while
e students watch. It is up to her to balance consultation with
ucation. She needs to look for every opportunity to help the students
arn, yet be sensitive to the needs and feelings of the sick person and
r family.

Teaching assistants: In the early stages of clinical learning, it is
pecially helpful if, apart from the instructor who conducts the
nsultation, a second instructor or experienced health worker is present.
is teaching assistant quietly guides the observing students in where to
ok in their books and how to record information in the 'patient report'
rms. This way, the consultation proceeds with little interruption, yet
e students receive individual help and answers to their questions. The
aching assistant can also quietly ask the students questions that lead
em to asking the right questions themselves.

Involving the sick person and her family as helpers: Sick persons
metimes feel angry about having students observe or take part in their
inical consultation. They may feel they are being used, without having
y choice in the matter. Unfortunately, this is often true.

You can often transform this situation by looking at the sick person
a person, not as a patient. To do this:

- Explain to the sick person and her family about the training course, and the need for health workers to gain experience in order to serve their communities better. Then ask if they are willing to help teach the student health workers about the problem.
- Respect the decision of those who say no. Do not try to pressure or shame them into saying yes.
- Keep the student group small--usually not more that 3 or 4.
- Include the sick person and any family members in the discussion of the problem. Make sure that details of the physical examination, diagnosis, treatment, and prevention are discussed clearly and simply.

If the sick person is involved in this way, you will be surprised how
ten she will end up feeling good about the consultation and the presence
the students. Several times we have seen persons thank the group warml
d say: "Thank you all so much! This is the first time I've gone to a
inic and had people explain things so I could understand!"

If the person's illness is an especially common one, and not
barrassing to her, she may not mind if other people waiting for
nsultation also hear about its signs, causes, prevention, and treatment.
ey may even have helpful ideas or experiences to contribute.

AGES OF CLINICAL LEARNING

The role students take in clinical consultations depends on a number factors. But generally they are given more responsibility as their aining progresses.

At first students may be mainly observers, staying in the background d saying little. As they gain more knowledge and experience, they ually take an increasingly active role (and the instructor a less active e). By the end of the training program, students should be able to take arge of the consultations. The instructor stays very much in the ckground, participating only when her advice is asked or when students rget an important step or make an error.

* * *

age One

Instructors take the lead. Students observe.

ring the Consultation

What Instructor Can Do:
- ask the sick person or family if students may observe
- conduct the consultation
- explain steps of history taking, physical exam, diagnosis, and treatment to both the sick person and the students (with care not to disturb the sick person)
- ask occasional questions of the students to help them think things through
- be sure information gathered is clear enough for students to fill out record sheets properly
- discuss appropriate preventive measures with the sick person (or family)

What Student Can Do:
- mostly observe
- look up the problem in the book and try to figure it out
- ask the instructor some questions (but with care not to disturb the sick person)
- practice filling out record sheets about the sick person

ter the Consultation

What Instructor Can Do:
- discuss important points of the consultation and the health problem, pointing out what was typical and what was not typical
- review student record sheets and compare with her own
- demonstrate and help students practice relevant tests and physical exam skills

- make sure students understand the inter-relationship and importance of each part of the consultation (observation, history, physical exam, tests, diagnosis, management, prevention, education)
- discuss with students their doubts, abilities, limits and how they could best handle a similar problem when they confront it in their villages (what to do or not do; if and when to refer)

What Student Can Do:
- ask instructor questions and comment on what they saw and learned
- practice on each other any physical exam skills used
- review how consultation was carried out

* * *

Stage Two

Instructor still leads. Students take a more responsible role.

During the Consultation

What Instructor Can Do:
- let students take the lead in history taking and examination when problems appear to be those with which they have experience, but be quick to step in when they need help
- make suggestions and ask questions to help students remember to make the right tests, interpret results correctly, and ask the sick person appropriate questions
- make sure the sick person and family feel comfortable with the consultation process
- take over when necessary
- make sure students use their books well and explain things to the sick person
- if necessary, repeat tests or physical exam to check if students did things right
- review treatment (medicine, dosage, etc.) and advice given by students
- be sure students give preventive advice, in a friendly way

What Student Can Do:
- help take history
- perform parts of the physical exam that they have already studied and practiced
- fill out record sheets
- use their books to diagnose and determine treatment (with help from instructor)
- help with simple curative measures
- give preventive advice or read preventive measures from their books for the sick person (or family)

After the Consultation

As in Stage One, but by now students can also take turns leading th review discussions and asking each other questions.

* * *

Stage Three

Students conduct the consultation. Instructor observes.

During the Consultation

What Instructor Can Do:
- be present as an observer. If possible, remain silent throughout the entire consultation, taking notes on points to discuss after the consultation.
- take an active part only when the health workers make an error that might result in harm or inadequate treatment
- when necessary, help students gain the person's confidence by agreeing with their conclusions or approving of their methods

What Student Can Do:
- conduct the entire consultation
- use books as much as possible; ask for suggestions or help from instructor only (but always) when unsure of what to ask or do
- together with the sick person (or family) make the decision about how to handle the sick person's problem; whether to instruct the person on treatment or refer him to a clinic or hospital

After the Consultation

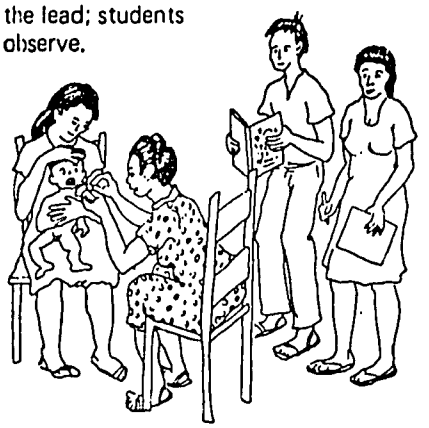
What Instructor Can Do:
- review the handling of the consultation: comment specifically on the strong and weak points, and what might have been done better
- encourage health workers to evaluate each other's handling of the consultation and to review each other's records for clarity, accuracy, and completeness

What the Students Can Do:
- similar to Stage One, except that the students take more responsibility for the review, evaluation, and questioning of each other.

* * *

STAGE 1:

Instructor takes the lead; students observe.

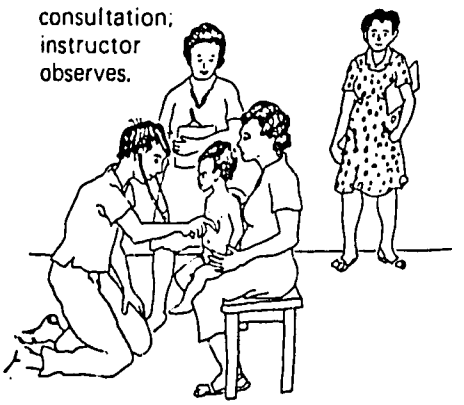


STAGE 2:

Instructor still leads, but students take increasing responsibility.

STAGE 3:

Students conduct the consultation; instructor observes.



STAGE 4:

Students in charge: instructor absent but on call if needed.

Stage Four

Students completely in charge. Instructor absent, but on call.

During the Consultation

Similar to Stage 3. This time, however, the instructor is not only silent, but absent, although on call when needed. In this way, by the end of the training period the clinical consultation is quite similar to the actual situation of a health worker at work in his village or community. He assumes much of the same responsibility. Although the instructor is on call if needed, by the end of the course the decision making is completely up to the health worker trainee.

After the Consultation

After the consultation is completed, the instructor can review the record sheets and discuss them with the health workers. This, too, is similar to what will happen when the instructor (or 'supervisor') visits the health workers' villages to help them review their records and 'trouble shoot' problems.

* * *

Methods of Teaching Skills

[from Teaching for Better Learning by F.R. Abbatt]

Teachers often use the following patterns when they teach skills:

1. Describe the skill - explain what the skill is, why it is important, when it should be used.
2. Demonstrate the skill - let the students see an expert (often teacher) perform the skill.
3. Arrange practice sessions.

This pattern is generally sensible, although the stages cannot be completely separated. For example it may be more interesting to start a demonstration. Or students may need more demonstration after they h had some practice.

IDEALLY THEORY AND PRACTICE SHOULD BE TAUGHT TOGETHER.

Describing a skill

The first stage in teaching a skill is to describe the skill. Th will involve explaining why the skill is important and why the student learn it. It will involve explaining when the students should use the skill and it will involve explaining the stages in performing the skil

For example if you are teaching how to give an injection, most students will know vaguely what an injection is why it is important. if you are describing the skills involved in persuading mothers to bri their children to an immunization clinic, some students may not realiz this is important.

Demonstrating a skill

When the skill has been described it should be demonstrated. Sometimes the demonstration is done at the same time as the descriptio

1. The demonstration must be correct. You must make sure any equipment you use will be available to the students when they are working in the field.

2. The demonstration must be visible.

3. Explain what you are doing. It is not enough to perform the skill correctly and visibly. You must explain what you are doing and emphasize important points. A handout, or written set of instructions will help you here.

Providing practice in performing skills

The most important stage in teaching students how to perform a ski is the practice. Unfortunately this is often the most difficult to organize and can take the most time.

1. All students must practice the skill.

2. The students should receive feedback about how well they are performing the skill.

Role Plays

Role-playing is a method which is useful in teaching communication skills. In this method the students act different parts as if they were a play. But instead of words or a script, the different students are or given an outline of a situation.

Projects

In a project the student - or a group of 3 or 4 students - is asked attempt a specified task. When the students do the project work they wi find out facts. But they will also increase their skills in talking to people, in collecting and reporting information and probably in other ar as well.

Simulations

Simulations utilize models to give students practice. An orange ca be used as a simulator, when students use it to practice injections. a simulated patient made of plastic may be used to practice insertion of a endotracheal tube.

Job experience

The most useful practice a student can have is to actually do the j itself.

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Using Role playing to teach skills

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The most useful practice a student can have is to actually do the job itself.

واکنش بیشتر نسبتی در شاگردان نخستین را نشان نمی‌دهد

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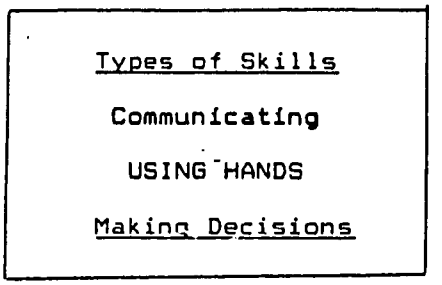
TOT SESSION 6 'Chart 1

TOT SESSION 6 How to Teach Skills
Objectives: By the end of the session the participants will:
- practice using a demonstration to teach a skill
- describe 3 types of skills paramedics need
- list three steps in helping a student learn a skill
- describe 4 NFEs which can be used to teach skills

TOT SESSION 6 Chart 2



Guidelines for Demonstrations

* Make sure it is correct.
* Make sure it is visible.
* Explain it again.

TOT SESSION 6 Chart 4

NON-FORMAL EDUCATION TECHNIQUES

USEFUL IN ALLOWING STUDENTS TO PRACTICE SKILLS

role playing

projects

simulations

job experience

TOT SESSION PLAN

Session: 7 Title: Teaching Aids Trainer: Purdin

Date: 20 May 1990 Time: 2:00 pm to 4:30 pm

Objectives: By the end of the session the participants will
- list at least 10 teaching aids
- review available training aids
- describe 5 guidelines for a good poster
- practice 1 technique for enlarging pictures
- prepare a poster for display

TIME	ACTIVITIES	RESOURCES
5 min	1. Introduction. Objectives.	chart
10 min	2. Brainstorm. What teaching aids can you think of? (videos, movies, slides, charts, books, posters, chalkboards, handouts, flannel boards, storybooks, photographs, models, plays, exhibits)	board
10 min	3. Let's look around the training center to see what teaching aids are already here.	models charts
10 min	4. Teachers often want to make charts and posters to use during their classes. Health workers may want to have posters in their clinic. Here are some guidelines for making good posters: - who is the audience? - only one idea per poster - positive message - fewer than 15 words - print using block letters - pictures and words should be large enough - colorful	chart
10 min	5. How to enlarge a picture.	chart
60 min	6. Exercise: Each student will create a poster to use in their presentation. They will select a picture, enlarge it, and prepare the poster for display.	newspr pencil rulers eraser
20 min	7. Walk around room to review student posters. Participants and facilitator identify criteria met, offer feedback regarding posters.	
10 min	8. Summary: What was useful in this session? Did we achieve our objectives? What NFEs were used?	

TOT SESSION 7 Chart 1

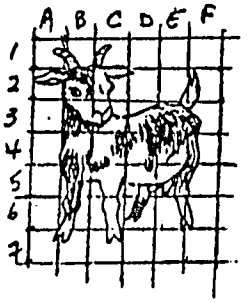
TOT SESSION 7 Teaching Aids
Objectives: By the end of the session
the participants will
- list at least 10 teaching aids
- review available training aids
- describe 5 guidelines for a good poster
- practice 1 technique for enlarging pictures
- prepare a poster for display

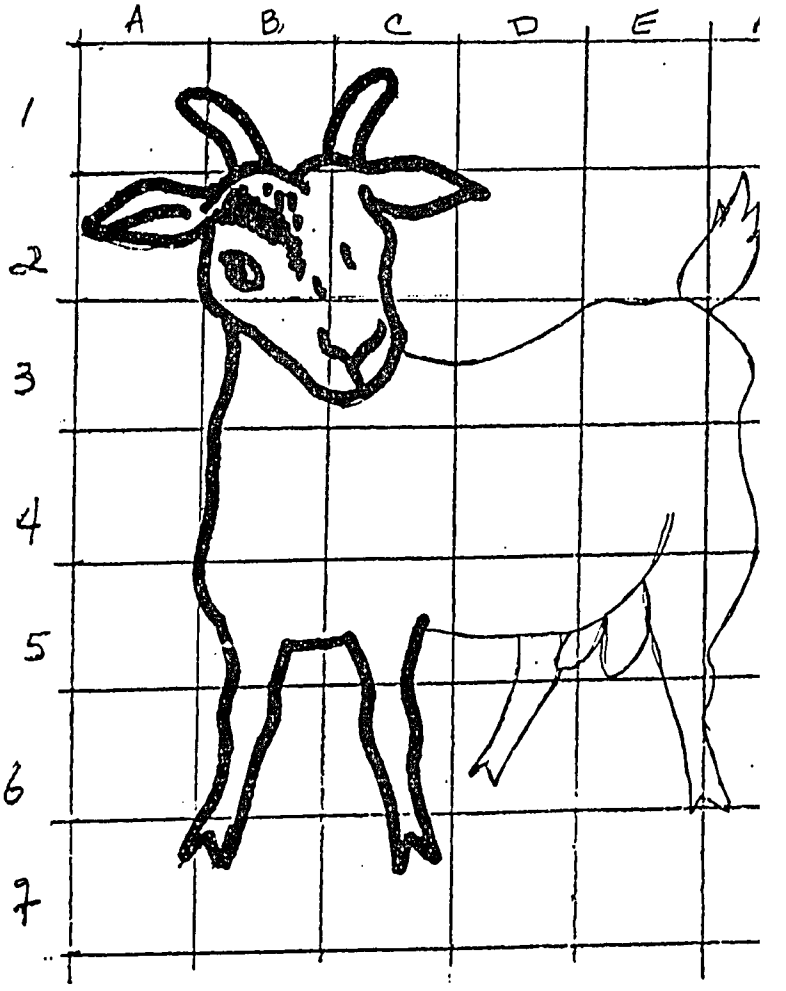
TOT SESSION 7 Chart 2

Guidelines for Making Good Posters

* Determine who is the audience.
* Let each poster communicate only one idea.
* Give a positive message.
* Use fewer than 15 words.
* Print words using block letters.
* Make pictures and words large.
* Be colorful.

TOT SESSION 7' Chart 3 -- How to Enlarge a Picture





TOT SESSION PLAN

Session: 8 Title: Lesson Planning Trainer: Purdin

Date: 21 May 1990 Time: 8:00 am to 4:30 pm

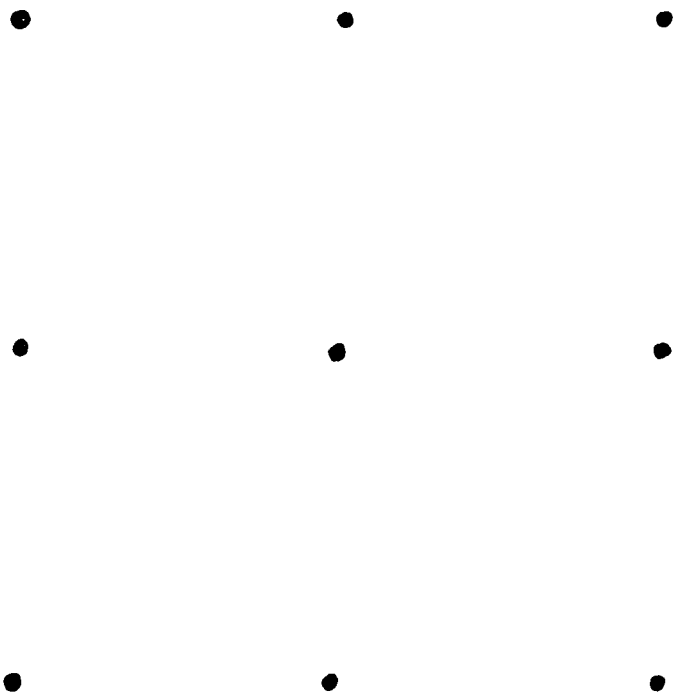
Objectives: By the end of the session the participants will
- list 3 reasons for planning lessons
- list 3 criteria for a learning objective
- write 2 learning objectives
- list the steps in planning a lesson
- develop a lesson plan using a standard format

TIME	ACTIVITIES	RESOURCES
10 min	1. Warm Up: I will show you a chart with diagram A & B for 2 seconds. Then you will reproduce the diagrams on your paper. Which is easier to remember A or B? Why? Think about this when planning lessons-- it is easier to remember things that are organized.	chart 1 paper
10 min	2. Today we are talking about lesson planning. You do not need to take notes the information will be in a handout you will receive at the end of class. Here are the objectives for today.	chart 2
10 min	3. Discussion: Why do we plan lessons? (better learning, better atmosphere in class, reusable resources, gets easier with practice)	board
10 min	4. Brainstorm: Let's think about being asked to teach a class. What was your first question when someone asked you to teach something?	board
	The first step in planning a lesson is to Review the Context of the Lesson Time Space Resources Students Place in the Course	chart 3 folded to reveal I

TIME	ACTIVITIES	RESOURCES
15 min	5. The second step in planning a lesson is to Define the Objectives. What do you want the students to do? Learning objectives are specific about the action of the student, they state the time and they identify the standard of measurement. Demonstration: Let's write some learning objectives. What subject? What should the student be able to do?	unfold chart board board
15 min 20 min	6. Paired Practice: In pairs think of a class you will teach (not one which has been mentioned today.) Write two learning objectives for your students. 4 or more samples are reviewed.	
10 min	7. Next we must plan the introduction. get acquainted/review the last lesson/ ask student's previous experience with the subject/identify objectives/tell a story/state a problem Tell the students where you are going. Indicate how the lesson will be assessed. How shall we introduce our session?	unfold char
30 min	BREAK	
15 min	8. Puzzle: Draw 4 lines to connect all the dots. The lesson in this puzzle is that there are ways to do things that are much more creative than our conventional thoughts.	chart 4 handout 1
15 min	9. Now we are ready to think about how we want to teach the subject. Think about what knowledge and skills the students' need to achieve the objectives. (This is like task analysis.) What do our students need to do?	board

TIME		ACTIVITIES	RESOURCES
30 min	10.	Select a Teaching Strategy suitable for the Skill. What are some teaching techniques?	chart 5
		What teaching techniques have you used? What techniques have been used today? Which of these do you have questions about? Where can you get ideas about techniques? What techniques should we use?	handout HHWL, Ab Medex
10 min	11.	Divide the activities. How much can be done in class? What outside activities can be used? Explain to the students how outside activities relate to the class. How shall we arrange our class?	
20 min	12.	Write out the plan How to use the form.	chart 6 handout
2 min		Let's stop for lunch. Then we'll finish looking at the process and make a plan.	
LUNCH			
5 min		Everyone count 11 chairs and move.	
10 min	12.	The next step is to plan the summary. Ask the class what they have learned. Review the objectives/main points. Give a handout. How will we summarize our class?	board
10 min	13.	Plan the Follow-up. What assignment will we give our students? Be specific. Review their work.	
10 min	14.	Plan the Assessment. During the lesson: exercises/practice/discussion/questions After the lesson: test/skills checklist/project (Good questions are hard to write (especially if they are translated.) Let someone else review them. What are some types of questions? Do the students need practice in test-taking? <u>Plan this before you teach the class.</u>	

TIME	ACTIVITIES	RESOURCES
10 min	15. We have finished our review of the lesson-planning process. Count 1-3.	charts 6
60 min	Spend 1 hour planning a lesson together.	
30 min	Reports from groups.	
15 min	16. Summary. Review objectives.	handout
	Assignment. Using the form each participant develops a lesson to present to the group. Lesson should be 30 minutes long. Must write 2 learning objectives. Must use 2 NFEs.(Get commitment from different participants for different NFEs so not everyone uses same style of presentation.) Facilitator will review each plan next morning.	handout



A Case Study

Presenting Complaint and Medical History:
A 32-year-old woman comes to the clinic complaining of fever for 10 days. The fever began slowly and has been getting higher every day. Aspirin relieves the fever for a while. She has had some loose bowel movements for the last two days. She also complains of a severe headache. She has had no appetite since the fever started. She has some abdominal pain.

Past medical history: She has had no serious illness in the past. Other than aspirin, she has been on no drugs or medications.

Family history: She has two living children. She has never had a miscarriage. She reports that her menstrual periods are normal.

Physical Examination:

Temperature:	39.5 C
Pulse:	78
Respirations:	22
B/P:	110/70
Weight:	62 kg

The woman looks ill. The mucous membranes inside her mouth are pink. Her tongue is coated. Her tonsils are not inflamed or swollen. No neck stiffness, goiter, or distended neck veins are noted. Her breath sounds are normal, with no heart murmurs. Her abdomen is slightly swollen. Her bowel sounds are active. She complains of tenderness and shows slight guarding upon palpation of her abdomen. No cervical tenderness or discharge are noted during the pelvic examination.

Study the information given above, then answer these questions.

1. What is the diagnosis?

2. What information in the case study was most helpful to you when you made your diagnosis?

3. Was any information missing from the case study that would have helped you make the diagnosis?

4. How would you treat this patient?

4. What advice would you give this patient?

LESSON PLAN

Session: _____ Title: _____ Date: _____

Time: _____ Trainer: _____

Objectives: By the end of the session the participants will be able to

-
-
-
-

TIME	ACTIVITIES	RESOURCES

TIME	ACTIVITIES	RESOURCES

Evaluation

Planning A Lesson

Once the curriculum topics are identified, each lesson can then be planned in detail. The lesson is the focus where the teacher's skill is applied. The teacher's understanding of what helps people learn and skill in using techniques suited to particular types of learning are given practical expression in the lesson.

In planning a lesson we go through a systematic process.

The preparation of a lesson includes collecting and making the resources needed by the plan which has been outlined; for example, handouts, models, visual aids, tests and exercises. Planning and preparing lessons takes a great amount of a teacher's time. This is time well spent because

- the students learn better and the class atmosphere improves.
- plans and resources used this year can be used again--in this way useful material is gradually built up.
- planning lessons becomes a habit of thought and gets quicker with practice.

Outline of the Lesson-planning Process

A. review the context of the lesson
   time, space, resources, students, place in the course
B. define the objective
C. plan the introduction
D. plan the learning strategies
   1. analyze the skills component of the objective
   2. select a teaching strategy suitable for the skill
   3. think of resources needed to support the strategy
   4. divide the activities into within the lesson and outside the lesson period
   5. write out the lesson procedure sequence
E. plan the summary
F. plan the follow-up
G. plan the assessment

A. Review the Context of the Lesson

Do not take a particular teaching situation for granted. See if it can be improved.

Time	The commonest mistake in teaching is cramming too much learning into too short a time. Can the time be increased? If not, reduce the objectives of the course or the lesson.
Space	Be imaginative. Don't assume the classroom is the only place to teach. There may be an empty shed, an unused laboratory, a local building, a veranda or a tree--where you can spread out your class for group work or practicals.
Resources	Make efforts to increase your teaching aids--use local materials, make your own models, posters, photographs, use student artists to draw your visual aids, contact local charities or agencies to buy/give you equipment.
Students	Review the level and number of your students. Numbers of students affect the types of methods which are feasible.
Course	Every lesson needs to be connected into a coherent program. Review what has preceded this lesson and what will follow.

B. Define the Objectives

Every planned lesson must have one or more objectives, if not it is an unplanned lesson.

The difficulty in defining the objective is related to time. The objective must be something which can be learned within the period allocated for the lesson. If the particular task being learned covers a period of several lessons then the task needs to be broken up into components.

Example Task: To be able to treat a dehydrated child
Lesson 1 Objective: To recognize the symptoms and signs of dehydration and decide whether it is moderate or severe.
Lesson 2 Objective: To identify dehydrated children requiring intravenous fluid and to refer
Lesson 3 Objective: To be able to make oral rehydration mixture --in a clinic --in a home and give to the child in correct quantities

Specify the objectives for every lesson.

Objectives define where you and the students are going!

C. Plan the Introduction

Refer to previous experience--remind the students by open questions about their experience or what they remember from previous lessons.

Introduce the objective in some way. Explain the direction, goal and meaning of the lesson.

Emphasize relevance. This may be done by:
- telling a story
- explaining a problem which the lesson may solve
- giving examples of application of the new learning
- asking questions which bring out the relevance

Indicate how and when the lesson will be assessed.

D. Plan the Learning Strategies

A teaching technique or a learning experience needs to be suited to the skill to be learned. This is obvious in some cases. For example, you cannot learn to ride a bicycle by listening to a lecture or attending a film. Similarly, you cannot learn to deliver a baby in a classroom.

1. Analyze the Skills Component in the Lesson Objective

After defining the objective to be achieved within the lesson, decide which type of skill or skills the student needs to learn to achieve the objective. The teaching method/learning experience will be chosen according to the skills needed.

2. Select a Teaching Strategy Suitable for the Skill

Here are some possible learning techniques which can be used:

Chalkboard	Games	Slides
Overhead Projector	Films	Checklists
Case Studies	Flow Charts	Photographs
Paired Practice	Demonstrations	Handouts
Role Plays	Manuals	Self Study
Projects	Discussion	Puzzles
Study Guides	Brainstorming	Snowballing
Field Work	Simulation	Student Teaching

3. Think of the Resources Needed to Support the Strategy

These may be stories, examples, illustrations, visual aids, models, exercises, handouts, charts and so on.

4. Divide the Activities

The activities needed to learn the objective may be done within the lesson period. But very often, because of time constraints, some activities are continued or completed outside the lesson--as homework, during a practical, or during a clinical rotation. The relation of the future activity to this lesson should be made clear to the student.

5. Write out the Lesson Procedure in Sequence

This is a help in putting the learning strategies in logical order and also in assessing the time required for each stage of the lesson.

V. Plan the Summary

There are many ways in which a teacher can summarize a lesson:

- ask the class to say what they have learned
- review the main points
- ask pertinent questions
- summarize in a handout
- put up a transparency/chart/write on blackboard

VI. Plan the Follow-up

Most lessons need to be followed up by the students to consolidate their learning by:

- reading and learning the handout
- looking up references in a manual or a library
- doing exercises/project work
- practicing during clinic/field work

VIII. Plan the Assessment

Assessment during the lesson:

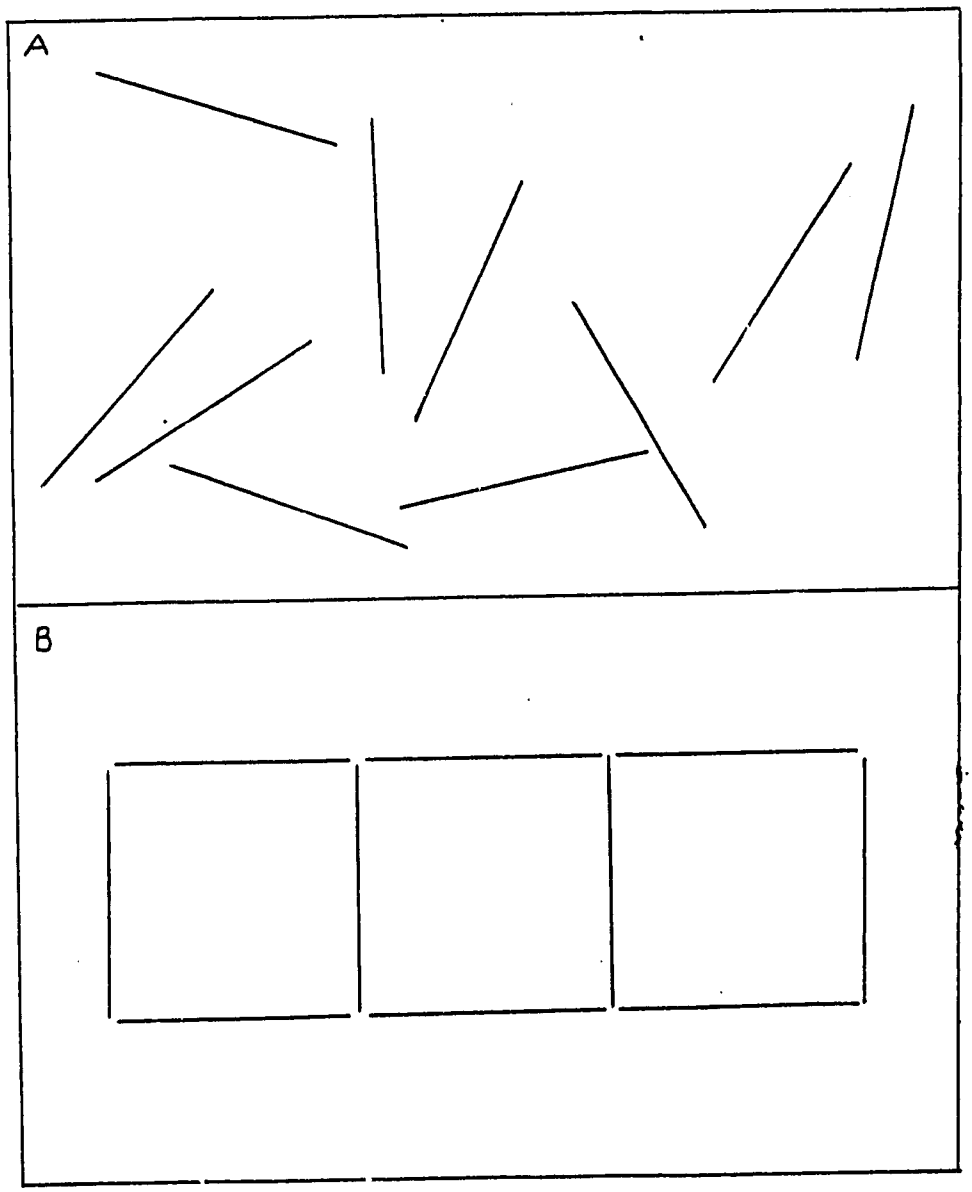
- give exercises to be handed back
- observe while practical work is taking place
- assess group work and discussion
- ask a rapid series of questions

Assessment later:

At the end of every lesson prepare an assessment to test that particular objective.
It might be:

- a multiple choice question
- a short-answer question
- a checklist
- a project

TOT SESSION 8 Chart 1



TOT SESSION 8 Chart 2

TOT SESSION 8 Lesson Planning
Objectives: By the end of the session
the participants will
- list 3 reasons for planning lessons
- list 3 criteria for a learning objective
- write 2 learning objectives
- list the steps in planning a lesson
- develop a lesson plan using a standard format

TOT SESSION 8 Chart 3

The Lesson Planning Process

A. Review the Context of the Lesson

1. time
2. space
3. resources
4. students
5. place in the course

B. Define the Objectives

C. Plan the Introduction

D. Plan the Learning Strategies

1. analyze the skills component of the objective
2. select a teaching strategy suitable for the skill
3. think of resources needed to support the strategy
4. divide the activities into 'within the lesson' and 'outside the lesson'
5. write out the lesson procedure sequence on the form

E. Plan the Summary

F. Plan the Follow-Up

G. Plan the Assessment

TOT SESSION 8 Chart 6

LESSON PLAN

Session: _____ Title: _____ Date: _____

Time: _____ Trainer: _____

Objectives: By the end of the session the participants will be able to

-
-
-
-

TIME	ACTIVITIES	RESOURCES

TOT SESSION PLAN

Session: 9 Title: Assessment Trainer: Purdin

Date: 22 May 1990 Time: 8:00 am to 12:00 noon

Objectives: By the end of the session the participants will
- identify 4 reasons for assessment
- list 3 occasions on which assessments are used
- describe 4 criteria for a good assessment
- practice writing 6 types of questions

TIME	ACTIVITIES	RESOURCES
25 min	1. Practice Test. How did you feel about taking a test?	handout 1
10 min	2. Why do we give tests? - to ensure adequate knowledge base - to encourage hard work - to guide study - to guide teaching	board
10 min	3. When do we give tests? - during selection process - before teaching to evaluate base level knowledge - after teaching to evaluate learning - during the course to evaluate progress - at the end of the course	board
15 min	4. Guidelines for good tests - tests important material - uses time and material economically - measures accurately - helps learning	chart 2
15 min	BREAK	
60 min	5. Discussion and practice writing different types of questions: Ask a participant to name one type of question. Talk about good and bad points of that type, how to write that type. Participants write one. A couple of samples are analyzed. Repeat for another type. (essay, multiple choice, short answer, checklist, true/false, matching.)	board
30 min	BREAK	
60 min	5. Continued	

TIME	ACTIVITIES	RESOURCES
20 min	6. Summary: What did we talk about today? Did we achieve our objectives? Were there any new NFEs today?	handout 2

SAMPLE TEST

1. Check the descriptions that are true for eczema.
   ___ a. infectious
   ___ b. starts often in early childhood
   ___ c. begins in old age
   ___ d. not infectious
   ___ e. occurs often in certain families
   ___ f. children who have it often get asthma later

A person complains of a toothache he has had for a week. His face is swollen near the aching tooth. His temperature is 38 C. The aching tooth has a hole in it. Tapping the tooth causes pain. How would you treat this patient?

   a. remov the tooth immediately
   b. give him aspirin and send him home. Tell him to return in one week if he still has the toothache.
   c. give him aspirin for pain and start him on penicillin.
   d. put in a temporary filling.

3. A trachoma infection easily spreads from person to person. List three examples of how trachoma spreads.
   a.
   b.
   c.

4. True or False
   ___ Pain on palpation is usually a sure sign of acute appendicitis.
   ___ Mild fever usually occurs in the early stages of acute appendicitis.
   ___ Involuntary guarding is a sign of inflammation of the abdominal lining.
   ___ Inflammation of the appendix progresses slowly. after two or three weeks, the patient's appendix will rupture.

5. When you examine the patient with a possible heart problem, you must focus on three major areas: _____ , _____ and _____.

6. What good personal health and diet habits help reduce the occurrence of urinary tract infections?

7. Matching

a. nan	___ protective food
b. spinach	___ body building food
c. dahl	___ energy food

8. Which of the following statements is <u>not</u> true of chicken pox?
   a. it is a viral disease
   b. the rash begins with white spots inside the mouth
   c. there are vesicles, pustules and scabs present on the skin at the same time
   d. it is contagious

9. A good teacher:
   a. shows enthusiasm
   b. avoids embarrassing the students
   c. knows the subject adequately
   d. leaves out what is not important
   e. all of the above
   f. none of the above

10. How do we measure learning?

ASSESSMENT METHODS

Oral Exams

In an oral exam one student is interviewed by one or two examiners. Usually the student is asked to tell the examiners what he knows about some topic or what he would do in some situation which might happen in his job.

The oral exam does have some advantages. Because the exam is "live" the examiner can ask for more detailed information and can probe to find out how much the student knows.

However this is not a very satisfactory method of assessment. Students are often made extremely anxious by the examiners, even though the examiners try to be friendly. This is an unfair stress on the students and quite different from the stresses they will face in their work. As a result many students get worse marks than they deserve. Orals also take a lot of time and have frequently been criticized because the marks given are unreliable. Further, the oral rarely tests important skills and does not usually help learning.

Therefore you should not use orals unless you have some specific and powerful reason for choosing this method.

Essays

Essays have been widely used in assessing students in the health professions. But again this method has very serious disadvantages.

In one course students were asked to write an essay on "Polio Immunization". This is a very poor test even though the topic was vaguely relevant to the students. (The students would be responsible for polio immunization as part of their jobs.)

The test is poor because:

- the students cannot know what is expected by the examiner. Should they describe the administration of an immunization program? Should they outline how the immunization prevents polio? Should they describe the side effects? And so on.
- the marking is likely to be unreliable. The reason is that because the topic is not clearly defined, different teachers will think different points are the most important--and give different marks as a result. Whether a student passes will depend very much on who marks the paper.
- the test is not valid. Students are not going to write essays in their job. They are going to immunize people. Therefore it would be much better to test the really important skills.
- the essays will take a long time to mark--if the teachers do this job thoroughly.
- the students are unlikely to learn much from the test.

How could the essay be improved?

The first point must be that a quite different assessment method would probably be better. However is an essay must be used you should:

- make the title much more specific--for example, "Describe how you would explain to mothers why their children should be immunized against polio." or "Explain how polio vaccine should be transported and given to children." These essay titles are fairer because it is more clear to students what they should write. Secondly they are more valid because they ask the students to describe important skills.
- prepare a marking scheme and follow it. This scheme will include a list of the major points which should be covered in the essay and may say how many marks should be given for accurate spelling, general clarity of explanation etc. All teachers marking the essay should use this scheme. This improves reliability.
- after the exam, show the marking scheme to the students and discuss it with them. This will improve learning.

Short Answer Questions

Short answer questions allow the teacher to ask questions about a larger proportion of the course and to mark the test more accurately and quickly.

Example of short answer questions

1. List 4 advantages to a family of proper rubbish disposal.
   a.
   b.
   c.
   d.

2. Draw a diagram showing the construction of a simple incinerator suitable for use in a small village.

3. Give two circumstances when burying rubbish is better than composting.
   a.
   b.

Short answer questions often ask students to make lists or state 2 advantages or draw a diagram. Because they are so much more specific they are quicker to mark and more reliable. They are also very much quicker to answer so in the time allowed for the exam many more topics can be assessed than in an essay exam.

There is still a great danger that this kind of question will only ask students to remember facts rather than apply knowledge or perform skills.

Multiple Choice Questions

Multiple choice questions are often called MCQs. They are a stage beyond the short answer question, because the students do not write any words. They just choose which of the answers is best.

Example--an MCQ of the one-from-five type

A patient tells you that he has noticed one of his eyes is red and he is worried. You can find no foreign body, but notice that the pupil is bigger in the red eye and the pupil does not respond to light. What is the most likely diagnosis?

a. trachoma
b. conjunctivitis
c. iritis
d. corneal ulcer
e. glaucoma

In this example the student has to choose between the possible answers and select the one answer which is best -- in this case "e." In this type of question there is a stem and five choices.

The stem is: "A patient tells you ..... likely diagnosis?"

The five choices are: "a. trachoma
b. conjunctivitis
c. iritis
d. corneal ulcer
e. glaucoma

Although it is possible to use 4 or 6 choices, five is the most suitable number. So this type of question is sometimes called the one from five type of multiple choice question (MCQ).

Another type of MCQ is the True/False type.

Example--of a true/false MCQ.

In glaucoma

a. there are usually white or grey spots on the cornea	T	F
b. the pupils are irregular	T	F
c. only one eye may be red	T	F
d. the patient should be referred to a health center	T	F
e. a foreign body is the most likely cause	T	F

Again there is a stem--in this example it is very short "in glaucoma." But this time the stem is followed by several statements. For each statement the student has to decide whether the statement is true or false. In this case "a" is false, so the student will draw a circle round "F". Choice "b" is also false, but "c" and "d" are true while "e" is false, so the

student should draw circles round the F,F,T,T and F respectively. In this case the student has to answer all five parts of the question.

Both these types of question are fairly commonly used although there are reasons for preferring the True/False type.

How good are MCQs?

They can certainly be marked very quickly and accurately. They can also be answered quickly so a lot of questions can be set in an exam--therefore a lot of the course can be covered.

On the other hand there are serious disadvantages. It is quite difficult to write clear questions--so writing the questions takes a lot of time. There is also the very serious problem that MCQs usually only test knowledge. Only rarely do they test decision making ability and they cannot test abilities to communicate or to perform procedures. So MCQs are unlikely to be valid for your course.

Despite these problems MCQs will probably be useful as one of the assessment methods in your course. They can be used to check factual knowledge, especially during the course. They are also very helpful when used for self-assessment or peer-assessment.

If you decide to use MCQs the following practical points may be helpful:

- you should allow roughly 2 minutes for each 5 part true/false question in an exam. So in an hour students can be expected to answer about 30 questions. If you find that students are not finishing the exam cut down the number of questions. It is not a race.

- for true/false questions it is probably best to give 1 mark for each correct choice, zero for no answer and take away one mark for each wrong choice.

In one-from-five questions use the same scheme except that there is no need to take away the mark for wrong answers.

- the pass mark for MCQs should be quite high. This is because the MCQ should be testing basic knowledge which all students should know. Therefore a pass mark as high as 80% or 90% can be used successfully. It is better to use easy questions with a high pass mark rather than harder questions with pass mark of 50 or 60.

- marking is made much faster if a separate response sheet is used for the student answers. Then a mask can be laid over the response sheet with holes cut out for the correct answers.

Patient Management Problems (Case Studies)

Patient management problems are a development of short answer questions. The main feature of them is that a series of questions are asked about a real case. Although they are called patient management problems they can be used in a wide range of subjects. In fact they can be used wherever students are being trained to make decisions. So they are also very useful for assessing students who are training to be health educators, community health workers, community nurses, health inspectors, etc.

Example of a patient management problem:

A woman comes to the health center and tells you that she is tired all the time. She asks you for a tonic. You find out that she is 30 years old and about 5 months pregnant.

1. List 3 things which you think might cause the tiredness.
2. List 2 other questions which you would ask her.
3. As a result of her answers, you suspect she is anemic. What physical signs would you look for?
4. Your examination confirms your diagnosis of anemia. What treatment (if any) would you prescribe and what other advice would you give?

This example has the advantages of a short answer question. It is clear to the student and it will be quick and reliable to mark (providing that all teachers involved agree what the possible causes of tiredness are.) It is also more valid as a test because it is based on the kind of work the students were trained to do. (It would be much better if each student met the patient and actually took a history and examined her.) If students are given the marking scheme after the exam they will also be able to learn from this.

How can you write patient management problems?

It is usually best if you base the problem on a real case that you have dealt with -- a boy who was brought to you with severe abdominal pain -- a shopkeeper who failed to keep his premises clean despite several visits from a health inspector -- a mother who rejected any advice on nutrition even though her children were malnourished. Of course you must work as a health worker yourself to follow this advice. But if you teach full time you can still talk to health workers, or even better, spend half a day with a health worker to write down examples of cases.

The next step is to divide the case into stages. What happened first? What decisions had to be made? What alternatives were there?

Then you should decide what bits of information you will tell the students and which bits you will ask them to tell you.

At this stage you will have a patient management problem, but you will still need to make a marking scheme. List all the answers that your students might give -- both right and wrong. Then decide how many marks you will give for each of the possible answers.

Project Reports

In a number of courses students are asked to work on a project. This may involve doing a survey of a community, working on a health care team for a few weeks, etc. Often the student reports on the project, and this can take a lot of time.

Naturally the students will be more motivated in the project if the reports are assessed and the marks count towards the final examination score.

However project reports are extremely difficult to mark fairly because there are usually no clear standards to follow. Some students may do very good work but present a poor report. Others will present a very clear and full report of poor work. Which is best and what standard will you accept

Some guidelines may help you.

1. Project work should be assessed by at least two people marking independently. The two marks should then be compared and discussed to reach a final mark.
2. Where possible, explain to students what standards they should aim for. Tell the students what you think a good project would be like. Where possible explain how much data should be collected, how many cases should be seen, what kinds of graphs or tables would be useful. But be careful not to restrict the students too tightly.
3. Let the students see some project work done in previous years which you think is good and also some which you think is bad. Explain your reasons. Of course you cannot do this the first time that you use projects -- so maybe the marks for the first projects should not be counted in the overall assessment.

Clearly the use of projects in assessment causes some problems for the teacher. What is their value? Project reports will take a lot of time to mark and the score may have a low reliability. But they can have high validity if the projects are chosen carefully to involve the students in important skills. Above all projects can be very powerful learning experiences and they should be assessed to encourage students to make the maximum effort.

Record Books

Record books have been used quite widely in nurse training and there are good reasons why they can be used in courses for other groups of primary health care staff.

The record book contains a list of skills or tasks which the student should be able to do. These tasks are the objectives or at least some of the objectives -- for the course. The students are responsible for learning how to do each of the tasks, and when they are ready they can ask a teacher to check their performance. During the course the students must do all of the tasks to a satisfactory standard. If the teacher thinks that the student's performance is good enough he signs the student's record book. If the performance is not good enough, the faults are explained and the student can try again later.

Example -- a page from a student's record book

Task	Date	Signature
17. Prepare a flip chart for use with an audience of 30 people.		
18. Give advice to a pregnant woman about ante-natal care.	20/10/89	M. Green

The record book does use quite a lot of the teachers' time because each student must be seen and their performance must be judged. This method can be difficult to organize because teachers may not be available when the student is ready to be assessed. Also some teachers may be known as easier markers so there are some problems about reliability. However on balance there are powerful advantages. The main one is that the record books help learning. They do this by making clear to the students what needs to be learned. They also make sure that when students are not up to standard the teacher is there to give advice. The second main advantage is that the method should be highly valid -- the students will be assessed on how well they can do the tasks and jobs which they are trained to do.

This is a slightly different type of assessment. Students do not get a mark out of 10 for each performance -- they are simply judged to be good enough or not. So at the end of the course a student may have done 23 out of the 29 set tasks to a suitable standard. It is then up to the examiners to decide whether this is a "pass." In some courses students must achieve a satisfactory standard on all the tasks. In other courses it may well be impossible to insist on this high standard.

Checklists

Checklists are not so much a method of assessment as a way of improving other forms of assessments -- especially practical or clinical assessments. Practical and clinical examinations can often be criticized because the mark is unreliable. Different examiners use different standards. Checklists reduce this problem and they also make sure that the way in which the student does the task is assessed.

Example--

Thin Blood Film Checklist

	Done	Not Done
1. Uses middle finger of left hand		
2. Cleans fingertip with alcohol		
3. Dries finger with clean cotton		
4. Allows blood to flow freely after lancet prick		
5. Puts single drop of blood on center of microscope slide		
6. Allows blood to spread along end of second slide		
7. Pushes spreader slide quickly		
8. Draws blood along behind spreader		
9. Does not blow on or shake slide		

The examiner can watch the student preparing the blood film and put ticks in the right hand column for each part done correctly. At the end of the test the number of ticks in the "done correctly" column are added up and they give a score for the student out of 9. The pass mark for this test must be decided by the examiner and he may feel that 7 out of 9 would be a suitable pass standard for this test. For other tests he might expect 50% or 90%. The pass standard will depend on the specific test.

The advantage of the checklist is that it will make the marking fairer. Different examiners watching a student do a task are more likely to give the same score if they have a checklist. The checklist is also very useful for giving feedback to students or teachers because the evidence is clear and it is simple. The examiner might tell the teacher, "most of your students did the blood film test quite well, but I noticed about half of them pushed the drop of blood instead of drawing it behind the spreader slide." This would clearly help the teacher realize that this point needed more emphasis during the next course.

In the same way detailed information can be given to each student. For example the student might be allowed to see the actual checklist for his own performance.

This example of a checklist is for a physical skill. Similar checklists can be prepared for communications skills and for attitudes but this is often rather more difficult.

Note that a task analysis will be very valuable in preparin a checklist.

In-course Assessment

During the training course, your students will probably spend time Working in hospitals, health centers or dispensaries. There they will be practicing the communication skills and the physical skills needed in their job. This time can be used for assessment as well as teaching. Probably the greatest difficult is that the teacher must rely on assessments made by many different people. So it is difficult to say that all the different people have similar standards. To help in this, checklists can again be used. But in this situation the checklists should be less detailed.

Example--

A Checklist for Assessing Students in a Health Center

	above average	average	below average
1. Keeps complete and accurate records			
2. Observes sterile procedures			
3. Establishes good relationships with patients			

Nurses or health workers supervising students can use forms like this to give a clearer picture of what the students can do or cannot do. Using this information the teacher:

1. makes decisions on whether students should pass or fail.

2. gives specific advice to students about what they need to learn.

3. improves the course in areas which are poorly learned.

This less detailed kind of checklist is again prepared from a task analysis.

Checklists can also be used to help assess attitudes.

Example-- a checklist for observing attitudes.

1. Very willing worker ——+——+——+——+——+—— Does as little as possible

2. Accepts instructions ——+——+——+——+——+—— Resents instructions

3. Very interested in patients ——+——+——+——+——+—— Not interested in patients

4. Always wants to learn ——+——+——+——+——+—— Not interested in learning

5. Always on time ——+——+——+——+——+—— Always late

This checklist might be used by a nurse on a ward where student nurses spend part of their training. The nurse would use one form for each student nurse. At the end of the training period she would think about the way each of the students had worked during their time in the ward.

For example the first student might have been quite willing to do what he was asked to do, but never seemed very enthusiastic or offered to do extra work. The nurse would note this down by putting a cross at about the middle of the line.....

1. Very willing worker ——+——+——X——+——+——Does as little as possible

In this way the nurse can give a fair and quick summary of the attitudes of the students to the teacher responsible for the course. This checklist can be used to give advice to the student nurse and can form part of the record which is used to decide whether the student nurse passes the course.

Conclusion

No assessment method is perfect. Each has some advantages and some disadvantages. The teacher should therefore use a variety of methods whenever this is possible.

Ideally the teacher should first decide what skills need to be assessed. These skills are, of course, the objectives of the course.

Then the best method should be chosen for assessing these skills. The method should be chosen on the basis of

1. requirements of the course
2. economy of time
3. reliability
4. validity
5. value as a learning tool.

TOT SESSION 9 Chart 1 [Put up before class.]

TOT SESSION 9 Assessment
Objectives: By the end of the session
the participants will:
- identify 4 reasons for assessment
- list 3 occasions on which assessments are used
- describe 4 criteria for a good assessment
- practice writing 6 types of questions

A good Test:

- tests important material
- uses time and material economically
- measures accurately (reliable, valid)
- helps learning

TOT SESSION PLAN

Session: 10 - 15 Title: Participant Presentations

Trainer: Workshop Participants Dates: 22 - 24 May

Time: Workshop Hours divided into 60 minute blocks

Objectives: By the end of the session the participants will
- present a 30 minute training session
- practice giving and receiving feedback

TIME	ACTIVITIES	RESOUR(
5 min	1. Introduction. Objectives.	ch
60 min	2. One participant presents a session followed by feedback. Each participant-lead session follows lesson plan process; includes two learning objectives; introduction; two NFEs; summary; follow-up; assessment methodology.	
	After the presentation everyone completes a Checklist for Training silently. Then people give presenter oral feedback. Then they give the presenter their completed checklists.	har

[Copy Checklist for Training from Session 2]

TOT SESSION 10 Chart 1

TOT SESSIONS 10 - 15 Participant Presentations
Objectives: By the end of the sessions the participants will
- present a 30 minute training session
- practice giving and receiving feedback

TOT SESSION PLAN

Session: 16 Title: Conclusion of TOT Trainer: Purdin
Date: 24 May 1990 Time: 10:30 am to 12:00 noon

Objectives: By the end of the session the participants will
- review their expectations of the TOT Workshop
- review the topics covered in the TOT
- evaluate the workshop
- identify NFE techniques to be used in the future
- receive certificates of participation

TIME	ACTIVITIES	RESOURCES
5 min	1. Introduction. Objectives. Today will be the last day of our workshop. What was the purpose of this time together? What were the expectations you had at the beginning? Were they met?	chart 1 chart 1 from session
10 min	2. Let's remember what we've covered this week. Look around the room.	board
30 min	3. Course evaluation: 15 min fill in form 15 min discussion	handout 1
30 min	4. What class will you teach in the next month? What NFEs will you use in that class?	chart 2
15 min	5. Awarding of Certificates	handout 2

TOT SESSION 16 Handout 1

Evaluation of TOT

1. What were the three most useful things in the workshop?

_____

_____

_____

2. Name three ideas from the workshop which you will use in your teaching.

_____

_____

_____

3. What suggestions do you have for improvement of the next TOT?

_____

_____

_____

4. Please rate the sessions on a scale of 1 to 5.
(1 = least useful, 5 = most useful)

Introduction/How People Learn/Change Theory	1	2	3	4	5
Trainer Characteristics	1	2	3	4	5
Feedback	1	2	3	4	5
How to Teach Attitudes, Knowledge, Skills	1	2	3	4	5
Teaching Aids	1	2	3	4	5
Lesson Planning	1	2	3	4	5
Assessment	1	2	3	4	5
Participant Presentations	1	2	3	4	5

5. Comments:

TOT SESSION 16 Handout 2 [Print on Freedom Medicine letterhead]

THAL TRAINING CENTER

Dr.

has successfully completed a 35 hour

TRAINING OF TRAINERS WORKSHOP

This course for trainers of health workers included the following topics:

- Learning Theory
- Trainer Characteristics
- Non-Formal Education Techniques
- Feedback
- Specific Techniques for Teaching Attitudes, Skills and Knowledge
- Preparation and Use of Visual Aids
- Lesson Planning
- Assessment and Evaluation

Susan Purdin, Facilitator Date

Freedom Medicine

PROVIDING MEDICAL AID TO REFUGEES

THAL TRAINING CENTER

Dr. Eiyan

has successfully completed a 25 hour

TRAINING OF TRAINERS WORKSHOP

This course for trainers of health workers included the following topics:

- Learning Theory
- Competency-based Training
- Active Learning
- Trainer Characteristics
- Non-Formal Education Techniques
- Preparation and Use of Visual Aids
- Assessment and Evaluation

Susan Purdin, Facilitator _____ Date _____

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TOT SESSION 16 Chart 1

TOT SESSION 16 Conclusion of TOT
Objectives: By the end of the session
the participants will
- review their expectations of the TOT Workshop
- review the topics covered in the TOT
- evaluate the workshop
- identify NFE techniques to be used in the future
- receive certificates of participation

TOT SESSION 16 Chart 2

PARTICIPANT	NFEs

DIRECTORY OF EP MODULES AND PAPERWORK

DOCUMENT NAME	FILENAME.EXT
CHECKLISTS:	
Dosage Calculation; Adult	CHEKLST .SKL
Dosage Calculation; Child	CHEKLST .SKL
Administration of Oral Meds	CHEKLST .SKL
Administration of Eye Meds	CHEKLST .SKL
Administration of IM Injections	CHEKLST .SKL
Administration of SQ Injections	CHEKLST .SKL
Administration of ID Injections	CHEKLST .SKL
Irrigation of Ear	CHEKLST .SKL
IV Set-Up	CHEKLST .SKL
IV Start	CHEKLST .SKL
IV Maintenance	CHEKLST .SKL
IV Discontinue	CHEKLST .SKL
Hand Washing	CHEKLST .SKL
Sterile Technique	STERILE .SKL
Wound Care	WNDCR .SKL
Local Anesthesia	LOCANES .SKL
Suturing	SUTURE .SKL
Incision & Drainage	I&D .SKL
Bladder Catheterization	NRSSKLS .SKL
NasoGastric Tube Insertion	NRSSKLS .SKL
Instrument Sterilization	NRSSKLS .SKL
Medical History	MEDHX .SKL
History & Physical Exam; Child	H&PCHILD.SKL
Physical Examination	PE .SKL
HANDOUTS:	
Master Skills Checklist	MASTSKL .HND
Information on Injections	INJECT .HND
Clinic Skills	CLINSKIL.HND
Curriculum Introduction	EPCURINT.HND
Student Guidelines	STUGUIDE.HND
MISCELLANEOUS:	
EP Syllabus	SYLLABUS.FM
EP-5 Schedule	SCHEDEP5.FM
Open Schedule Form	SCHEDULE.FM
Key to File Namechanges	EPKEY .FM
Outline Lesson Plans & Objectives	FORMAT .FM
Directory of Modules & Paperwork	DIRECTRY.FM

DOCUMENT NAME

MODULE OBJECTIVES/LESSON PLANS:

Clinical Skills.....	SKILLS .OBJ
	SKILLS .LP
Pharmacology / CMC Manual.....	PHARM .OLP
Gastrointestinal System.....	GI .OLP
Circumcision.....	CIRCUM .OLP
Respiratory System.....	RESPIR .OLP
Dental.....	DENTAL .OBJ
	DENTAL .LP
Trauma / Wound Management.....	TRAUMA1 .OLP
	TRAUMA2A.OBJ
	TRAUMA2B.OBJ
	TRAUMA2 .LP
	TRAUMA3A.OBJ
	TRAUMA3B.OBJ
	TRAUMA3 .LP
	TRAUMA4A.OBJ
	TRAUMA4B.OBJ
	TRAUMA4 .LP
	TRAUMA5A.OBJ
	TRAUMA5B.OBJ
	TRAUMA5 .LP
	TRAUMA6 .OBJ
	TRAUMA6 .LP
	TRAUMA7 .OBJ
	TRAUMA7 .LP
	TRAUMA8 .OBJ
	TRAUMA8 .LP
	TRAUMA9 .OBJ
	TRAUMA9 .LP
	TRAUMA10.OBJ
	TRAUMA10.LP
Cardiovascular System.....	CARDIO .OLP
	CARDIO2 .OLP
Genitourinary System.....	GEN-URIN.OBJ
	GEN-URIN.LP
Musculoskeletal System.....	MUSCSK .OLP
Eye.....	EYE .OBJ
	EYE .LP
Ear / Nose / Throat.....	ENT .OBJ
	ENT .LP
Infectious Diseases.....	INFECT .OLP
Pediatrics.....	PEDS .OBJ
	PEDS .LP
Maternal / Child Health.....	PRENATAL.OLP
	LBR-DLVY.OLP
	PSTPRTM .OLP
	WOMNSCR .OLP
Nutrition.....	NUTRITN .OBJ
	NUTRITN .LP

FILENAME:DIRCTRY.FM

DOCUMENT NAME

MODULE OBJECTIVES / LESSON PLANS:

Neurologic System.....	NEURO .OLP
Blood / Anemia / Lymphatics.....	BLOOD .OLP
Endocrine System.....	ENDOCRIN.OLP
Skin System.....	SKIN .OLP
Immunization / EPI.....	IMMUNE .OLP
Environmental Health.....	ENVHLTH .OLP
Health Teaching.....	HLTHED .OLP
Inpatient Management.....	INPTMG1 .OBJ
	INPTMGT .LP
Instrument Sterilization.....	STERILE .OBJ
	STERILE .LP
Mental Health / Drug Abuse.....	MENTHLTH.OLP
Health Systems Management.....	HSMGMT .OLP
Mine Awareness.....	D-MINE .OLP

FILENAME:DIRCTRY.FM

EEDOM MEDICINE EXPANDED PARAMEDIC TRAINING PROGRAM
5 CURRICULUM/SYLLABUS

TRODUCTION
llowing are goals/objectives/topics to be covered for each module in EPS
ey include all the WHO Guidelines for Midlevel Health Workers and the
re content of the manuals currently in use by Freedom Medicine,
ternational Medical Corps, and Mercy Corps International. All medicatio
d therapy is generally in accordance with the CMC Therapeutic Guide and
rmulary.

e course is directed at students with the following minimum standards:
- at least six months midlevel health worker training course
- at least six months experience working inside Afghanistan
- satisfactory performance on written and practical skills examination.

ACTICAL SKILLS EVALUATION/REVIEW 60 hours
Introduction/orientation to use of skills checklists.
Using brief lecture/demonstration/return demonstration format students will complete the following checklists:
a. History and Physical Examination, Adult
b. History and Physical Examination, Child
c. Common Nursing Procedures
i. IM, IV, SQ, and ID injections including dosage calculaton
ii. Dressing changes
Specific areas of deficiency in the above skills will be identified and a remedial plan formulated for each student; if deficiencies are deemed too great i.e. inability to perform basic history, vital signs and physical examination, student will not be allowed to continue.

ARMACOLOGY/MEDICATION REVIEW 2.5 hours
Introduction to CMC Formulary
BASIC review of drug uptake/distribution/metabolism as it relates to dosage, route of administration, length of therapy.
Review of dosage calculations based on weight/age.
Review of indications/contraindications.
BASIC concepts of side effects/allergy.

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ASTROINTESTINAL SYSTEM 5.0 hours

. Review of GI anatomy and physiology
. Review of history/physical for GI disease.
. Differential diagnosis of diarrhea with treatment:
. a. viral
b. bacterial
c. parasitic
d. extra-intestinal infections
e. chemical
f. allergic
g. cholera(avoid overdiagnosis)
. Recognition, prevention and treatment of dehydration
a. degrees of dehydration
b. ORS preparation/teaching
c. oral, NG, and IV therapy
Recognition, prevention and treatment of worms(segmented and non-segmented)

Recognition, prevention and treatment of:
a. typhoid
b. hepatitis, cirrhosis, and ascites
c. hemorrhoids
d. constipation
e. gastroenteritis
f. gastritis and peptic ulcer disease
Differential diagnosis, treatment, and referral of upper and lower GI bleeding.
Differential diagnosis, treatment and referral of acute abdomen:
a. appendicitis
b. cholecystitis
c. intestinal obstruction
d. intestinal perforation
Basic dietary counseling
Teaching with regard to GI disease prevention.
.. Nasogastric tube(NGT)-indications and technique of passage

IRCUMCISION 2.5 HOURS

Indications/contraindications
Anatomy
Sterile technique
Demonstration of procedure
Followup/complications
B. Weekly attendance at circumcision clinic on rotational basis.

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SPIRATORY 5.0 HOURS

Review of respiratory anatomy and physiology
Review of history/physical exam of respiratory disease.
Recognition, prevention and treatment of the following:
a. common cold
b. asthma
c. bronchitis
d. pneumonia
e. chronic obstructive pulmonary disease
    i. chronic bronchitis
    ii. emphysema
f. tuberculosis(referral)
g. lung cancer
Problem-oriented approach to:
a. cough
b. chest pain
c. shortness of breath
d. sputum/hemoptysis

NTAL 5.0 HOURS

BASIC dental anatomy and physiology
Recognition and treatment of dental abscess, caries, gingivitis and fractured jaw(immobilization and referral)
Preventative care: cleaning, flossing and scaling.
Curative care:
a. anesthesia
b. extraction, including root removal, with suture of socket as needed.
c. placement of temporary fillings
Recognition of general disease by oral signs and symptoms.
B. Students also receive 24 hours clinical instruction.

!AUMA/WOUND MANAGEMENT 22.5 HOURS

und Management

Basic wound care

a. clean and sterile technique

b. dressings

New wounds

a. recognition and treatment of the five types of wounds

b. special considerations for war wounds

c. local anesthesia

d. surgical debridement

e. single layer wound closure(suture)

f. arterial ligation

Old wounds

a. recognition and treatment of simple infected wounds

b. recognition and incision and drainage of abscess

c. appropriate timing and usage of antibiotics

Burns

a. causes

b. classification

c. degrees

d. rule of nines

e. treatment

i. fluid therapy

ii. debridement

iii. dressings

Bites

a. snake--venomous vs non-venomous NO INCISION AND SUCTION

b. scorpion

c. animal

d. human

auma

Approach to injured patient

a. assessment of airway, breathing and circulation(ABC's)

b. airway management

c. rescue breathing

d. control of bleeding by direct pressure, elevation, pressure points, or as last resort tourniquet.

e. CPR

Recognition and treatment of shock with IV therapy and leg elevation.

Patient survey

a. primary

b. secondary

Recognition and treatment of head and spine injuries

a. review of related anatomy and physiology

b. review of related history and physical

c. conservative care for head injuries

d. importance of immobilization for spine injuries.

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Recognition and treatment of chest injuries
a. review of related anatomy and physiology
b. review of related history and physical
c. rib fractures
d. pneumothorax, open and closed
e. flail chest
f. tension pneumothorax
g. hemothorax

Recognition and treatment of abdominal injuries
a. review of related anatomy and physiology
b. review of related history and physical
c. IV therapy, antibiotics, NG tube and Foley as needed
d. appropriate referral

Genital injuries
a. Review of related anatomy and physiology
b. Review of related history and physical
c. Foley catheter and antibiotics as needed
d. appropriate referral

Emergency care and splinting of fractures
a. Open vs. closed fractures
b. Signs and symptoms---the 5 "P's"
c. Principles of splinting
d. Specific splints for:
    a. clavicle
    b. shoulder dislocation
    c. humerus
    d. elbow
    e. wrist/hand
    f. hip/femur
    g. knee
    h. tibia/fibula
    i. ankle
    j. foot/toe

Heat-related injuries
a. heat cramps
b. heat exhaustion
c. heat stroke

. Cold injuries
a. frostbite
b. hypothermia

. Triage and multiple trauma

RDIOVASCULAR 2.5 HOURS

Review of anatomy and physiology
Review of history and physical
Recognition and treatment of:
a. hypertension
b. angina pectoris
c. myocardial infarction
d. congestive heart failure
e. rheumatic fever
f. varicose veins/thrombophlebitis

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NITOURINARY 5.0 HOURS

Review of anatomy and physiology
Review of history and physical
Recognition, prevention and treatment of:
a. urinary tract infections
    i. cystitis
   ii. pyelonephritis
  iii. epididymitis
   iv. prostatitis
b. kidney/bladder stones including renal colic
c. urinary retention
d. testicular torsion
e. testicular masses-hydrocoele vs others
f. undescended testes-referral after age 2 years
g. genital lesions/discharges/STD's
h. impotence/infertility-referral
Foley catheter-indications and technique of insertion

SCULOSKELETAL 5.0 HOURS

Review of anatomy and physiology
Review of history and physical
Recognition and treatment of common sprains/strains including acute/chronic back pain
Symptomatic treatment of "total body pain"
Differentiation of arthritis vs arthralga and treatment of:
a. septic arthritis
b. rheumatoid arthritis
c. osteoarthritis or degenerative joint disease
d. rheumatic arthritis

Recognition and treatment of acute/chronic osteomyelitis
Recognition and treatment, including splinting and reduction of the following fractures/dislocations:
a. clavicle
b. humerus
c. elbow
d. wrist
e. finger/hand
f. femur
g. tibia/fibula
h. ankle
i. foot/toe
Physiotherapy concepts for post-injury and polio
Recognition and referral as available for disabled.

E 2.5 HOURS

Review of anatomy and physiology
Review of history and physical
Recognition, prevention and treatment of:
a. conjunctivitis
    i. viral
   ii. bacterial
  iii. allergic
   iv. trachoma
b. eyelid infections
    i. stye
   ii. blepharitis
  iii. dacrocystitis
c. eye trauma
    i. foreign body removal
   ii. corneal ulcer
  iii. hyphema
   iv. penetrating trauma
d. pterygium
e. xerophthalmia(vitamin A deficiency)
Recognition and referral of:
a. cataracts
b. iritis
c. glaucoma
d. sudden eye pain with visual loss

R/NOSE/THROAT 2.5 HOURS

Review of anatomy and physiology
Review of history and physical
Recognition, prevention and treatment of:
a. common cold
b. otitis media, acute and chronic
c. otitis externa
d. cerumen impaction
e. tympanic membrane perforation, acute and chronic
f. mastoiditis
g. sinusitis, acute and chronic
h. nose bleed with anterior packing
i. allergic rhinitis
j. pharyngitis, bacterial and viral
k. tonsillitis including streptococcal
l. diptheria
m. croup/epiglottitis
n. thrush
o. apthous ulcer(canker sore)
Hearing loss--appropriate referral

INFECTIOUS DISEASE 5.0 HOURS

1. Review of infectious agents:
   a. virus
   b. bacteria
   c. fungus
   d. parasite
2. Concepts of mode of transmission and contamination
3. Recognition, prevention and treatment of:
   a. malaria
   b. anthrax
   c. brucellosis
   d. tetanus
   e. rabies
   f. meningitis
   g. sepsis

PEDIATRICS 10.0 HOURS

1. Review of history and physical examination of children

2. Recognition, advice and treatment of:
   a. measles(rubella)
   b. chickenpox
   c. pertussis
   d. tetanus
   e. meningitis
   f. scarlet fever
   g. rubeola
   h. convulsions-febrile vs other
   i. polio
   j. mumps
   k. tuberculosis
   l. diptheria
3. Complications of EPI diseases with referral as needed
4. Recognition and referral of congenital anomalies
5. Recognition and treatment of diarrheal disease
   a. history
   b. causes
   c. cultural beliefs affecting treatment
   d. dangers of/recognition of dehydration
   e. rehydration with ORS, oral and NG
   f. IV therapy including calculation of fluid deficits by degrees of dehydratic and body weight
   g. medical therapy
6. Growth and development
   a. concept of growth monitoring
   b. developmental milestones
   c. relationship between hygeine and growth/development

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MATERNAL/CHILD HEALTH 10 HOURS

Pregnancy/Prenatal Care

1. Definition of pregnancy and age of viability
2. Fertilization and length of pregnancy
3. Concepts of fundal height
4. Avoidance of meds during pregnancy including two contraindicated antibiotics
5. Need for iron and multivits
6. Function of placenta
7. Fetal development
8. Concepts of prenatal care
   a. purpose and number of visits
   b. history/physical examination
   c. risk factors
   d. diet/immunizations(if possible)
9. Common prenatal problems: recognition and treatment
   a. minor-morning sickness, heartburn, constipation, etc.
   b. major-anemia, diabetes, heart disease, ectopic pregnancy, toxemia, fetal death, bleeding, malaria, goiter, urinary tract infection
10. Support and supervision of traditional birth attendants

Labor and Delivery

1. Diagnosis of labor
2. History and physical of woman in labor
3. Stages of labor
4. Common problems: recognition and treatment
   a. retained placenta
   b. incomplete placenta
   c. postpartum hemorrhage
   d. preterm labor
   e. early rupture of bag of waters
   f. prolonged rupture of bag of waters
   g. prolonged labor
   Immediate postpartum care of mother and newborn

Postpartum/Newborn

1. Postpartum history and physical
2. Recognition and treatment of:
   a. childbed fever
   b. mastitis/breast abscess
   c. prolonged/abnormal bleeding
3. Breast feeding: education and common problems
4. Normal newborn history and physical
5. Recognition and treatment in newborn of:
   a. cradle cap
   b. diaper rash
   c. jaundice
   d. diarrhea
   e. conjunctivitis
   f. sepsis
   g. tetanus

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Women's Care

1. Recogniton and treatment of:
   a. infertility(referral)
   b. dysmenorrhea
   c. abnormal bleeding
   d. vaginal discharge
2. Child spacing(on request)

NUTRITION 7.5 HOURS

1. Interaction of food and health
2. Type and function of the three food groups:
   a. body-building(protein)
   b. energy(carbohydrates)
   c. protective(vitamins and minerals)
3. Breast feeding/weaning
   a. importance of breast milk during first four months and continuing til age two years
   b. cup and spoon preferable to bottle
   c. nutritional needs of nursing mother
   d. weaning at four months with super-porridge and gradual introduction of other foods
4. Rice oral rehydration therapy(ORT)
   a. review of diarrheal disease/dehydration
   b. preparation and teaching of rice ORT
5. Nutritional assessment
   a. food history and related physical findings
   b. purpose and meaning of Mid Upper Arm Circumference(MUAC) including making MUAC bands for clinical use
6. Recognition, prevention and treatment of marasmus and kwashiorkor with fortified milk solutions
7. Recognition, prevention and treatment of the following as they relate to nutritional risk or compromise:
   a. anemia
   b. goiter
   c. Vitamin A deficiency
   d. measles
   e. obesity

NEUROLOGY 2.5 HOURS

1. Review of anatomy and physiology
2. Review of history and physical
3. Recognition, prevention and treatment of:
   a. headache
   b. convulsions(seizures)
   c. coma
   d. stroke
4. Review of head injury diagnosis/management

FILENAME:SYLLABUS.FM

BLOOD/ANEMIA/LYMPHATICS 2.5 HOURS

1. Review of anatomy and physiology
2. Review of history and physical
3. BASICS of blood formation and O2/CO2 exchange
4. Problem-oriented approach to:
   a. lymphadenopathy
   b. anemia

ENDOCRINE 2.5 HOURS

1. Review of anatomy and physiology
2. Review of history and physical
3. Recognition, prevention and treatment of:
   a. diabetes mellitus
   b. goiter
   c. hypo/hyperthyroidism

DERMATOLOGY 2.5 HOURS

1. Review of anatomy and physiology
2. Review of history and physical
3. Recognition and treatment of:
   a. impetigo
   b. scabies
   c. pediculosis(lice)
   d. itching/dry skin
   e. abscess
   f. acne
   g. cellulitis
   h. herpes simplex/zoster
   i. candidiasis and fungal infections
   j. allergic skin disease--eczema, contact dermatitis, urticaria
4. Recognition, prevention and referral of:
   a. cutaneous leprosy
   b. cutaneous leishmaniasis

IMMUNIZATION 2.5 HOURS

1. Concepts of immunity
2. Review of EPI diseases/immunization schedule
3. Importance of immunization in disease prevention
4. Identification and referral of women/children
5. Community teaching and assistance in EPI program

ENVIRONMENTAL HEALTH 5.0 HOURS

1. Components of prevention
   a. personal hygeine
   b. food handling/sanitation
   c. clean water supply
   d. waste disposal: human, animal, household, clinic
   e. vector control: insect, rodent
2. Assessment of community problems/action plan
3. Emphasis as clinic as model for community

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HEALTH TEACHING 5.0 HOURS

1. Identification of target behaviors and formulation of teaching plan
2. Definition of level of local knowledge
3. Use of available local teaching resources
4. Teaching methods for individuals and groups
   a. lecture
   b. demonstration
   c. visual aids
   d. role playing
   e. group consensus
5. Evaluation of teaching objectives
6. Motivation of community: use of community leaders
7. Importance of modeling correct practices in clinic and personal life

INPATIENT MANAGEMENT 2.5 HOURS

1. Control of infection
   a. handwashing
   b. sterile technique
   c. isolation technique
2. Care of sick patients
   a. positioning
   b. personal hygeine
   c. diet
   d. bedmaking/prevention and treatment of bedsores
   e. intake and output measurement
3. Ventilation
   a. breathing exercises
   b. postural drainage
4. Review of:
   a. urinary catheterization
   b. nasogastric tube insertion

STERILIZATION 2.5 HOURS

1. Methods
   a. heat
   b. moisture/steam
   c. chemicals
2. Identification of appropriate methods for field use
3. Handling equipment and materials
   a. care of equipment
   b. handling sterile instruments/materials
   c. disposal of contaminated materials/fluids

FILENAME:SYLLABUS.FM

MENTAL HEALTH/DRUG ABUSE 2.5 HOURS

1. Recognition, prevention and treatment of:
    a. anxiety
    b. insomnia
    c. agitation
    d. depression
    e. psychosis(referral)
2. Common drugs of abuse: recognition and treatment
    a. charas(hashish)
    b. tobacco(naswar)
    c. heroin
    d. opium
    e. alcohol

HEALTH SYSTEM MANAGEMENT SKILLS 2.5 HOURS

1. Concepts of data collection and notification
2. Identification of referral sources and other available medical resources: integration and cooperation
3. Clinic management
    a. maintaining area/clinic cleanliness
    b. disposal of waste products
    c. keeping supplies, drugs and equipment
        i. storage
        ii. records
        iii. ordering/resupply
4. Personnel
    a. hiring
    b. supervision
    c. training
5. Community outreach

MINE AWARENESS 2.5 HOURS

1. Field trip/lecture/demonstration per Operation Salaam

FILENAME:SYLLABUS.FM

DIRECTORY OF EP MODULES AND PAPERWORK

DOCUMENT NAME	FILENAME.EXT
CHECKLISTS:	
Dosage Calculation; Adult	CHEKLST .SKL
Dosage Calculation; Child	CHEKLST .SKL
Administration of Oral Meds	CHEKLST .SKL
Administration of Eye Meds	CHEKLST .SKL
Administration of IM Injections	CHEKLST .SKL
Administration of SQ Injections	CHEKLST .SKL
Administration of ID Injections	CHEKLST .SKL
Irrigation of Ear	CHEKLST .SKL
IV Set-Up	CHEKLST .SKL
IV Start	CHEKLST .SKL
IV Maintenance	CHEKLST .SKL
IV Discontinue	CHEKLST .SKL
Hand Washing	CHEKLST .SKL
Sterile Technique	STERILE .SKL
Wound Care	WNDCR .SKL
Local Anesthesia	LOCANES .SKL
Suturing	SUTURE .SKL
Incision & Drainage	I&D .SKL
Bladder Catheterization	NRSSKLS .SKL
NasoGastric Tube Insertion	NRSSKLS .SKL
Instrument Sterilization	NRSSKLS .SKL
Medical History	MEDHX .SKL
History & Physical Exam; Child	H&PCHILD.SKL
Physical Examination	PE .SKL
HANDOUTS:	
Master Skills Checklist	MASTSKL .HND
Information on Injections	INJECT .HND
Clinic Skills	CLINSKIL.HND
Curriculum Introduction	EPCURINT.HND
Student Guidelines	STUGUIDE.HND
MISCELLANEOUS:	
EP Syllabus	SYLLABUS.FM
EP-5 Schedule	SCHEDEP5.FM
Open Schedule Form	SCHEDULE.FM
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FILENAME:DIRCTRY.FM

DOCUMENT_NAME

MODULE_OBJECTIVES/LESSON_PLANS:

Clinical Skills.....	SKILLS .OBJ
	SKILLS .LP
Pharmacology / CMC Manual.....	PHARM .OLP
Gastrointestinal System.....	GI .OLP
Circumcision.....	CIRCUM .OLP
Respiratory System.....	RESPIR .OLP
Dental.....	DENTAL .OBJ
	DENTAL .LP
Trauma / Wound Management.....	TRAUMA1 .OLP
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	TRAUMA7 .LP
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	TRAUMA8 .LP
	TRAUMA9 .OBJ
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	TRAUMA10.LP
Cardiovascular System.....	CARDIO .OLP
	CARDIO2 .OLP
Genitourinary System.....	GEN-URIN.OBJ
	GEN-URIN.LP
Musculoskeletal System.....	MUSCSK .OLP
Eye.....	EYE .OBJ
	EYE .LP
Ear / Nose / Throat.....	ENT .OBJ
	ENT .LP
Infectious Diseases.....	INFECT .OLP
Pediatrics.....	PEDS .OBJ
	PEDS .LP
Maternal / Child Health.....	PRENATAL.OLP
	LBR-DLVY.OLP
	PSTPRTM .OLP
	WOMNSCR .OLP
Nutrition.....	NUTRITN .OBJ
	NUTRITN .LP

FILENAME:DIRCTRY.FM

DOCUMENT_NAME

MODULE OBJECTIVES / LESSON PLANS:

Neurologic System.....	NEURO .OLP
Blood / Anemia / Lymphatics.....	BLOOD .OLP
Endocrine System.....	ENDOCRIN.OLP
Skin System.....	SKIN .OLP
Immunization / EPI.....	IMMUNE .OLP
Environmental Health.....	ENVHLTH .OLP
Health Teaching.....	HLTHED .OLP
Inpatient Management.....	INPTMGT .OBJ
	INPTMGT .LP
Instrument Sterilization.....	STERILE .OBJ
	STERILE .LP
Mental Health / Drug Abuse.....	MENTHLTH.OLP
Health Systems Management.....	HSMGMT .OLP
Mine Awareness.....	D-MINE .OLP

FILENAME:DIRCTRY.FM

KEY TO EP CURRICULUM FILES: TITLES AND EXTENSIONS

All paperwork associated with the EP Curriculum should:

*Have keywords or a descriptive in the title

*Have a standard extension (see below)

*Have the filename at the bottom of each single sheet or at the end of each document

Please use these extensions for WordPerfect files:

1. .FM = Introductions or Information
2. .HND = Handouts (either for students or training staff)
3. .SKL = Skills Checklists
4. .OBJ = Learning Objectives
5. .LP = Lesson Plans
6. .OLP = combined Objectives and Lesson Plans

FILENAME:EPKEY.FM

FREEDOM MEDICINE
EXPANDED PARAMEDIC TRAINING PROGRAM
PLANNED SCHEDULE EP-5

	SAT	SUN	MON	TUE	WED	THU	FRI
	1 New EP ARRIVES	Orient/ Stdy Hbts	----PRACTICAL SKILLS EVALUATION & REFRESHER----				OFF
WK 2	----------PRACTICAL SKILLS EVALUATION AND REFRESHER TRAINING----------						OFF
WK 3	Clinic Pharm.	Clinic GI	Clinic GI	Clinic Circumsion	Clinic Resp.	Clinic Resp.	AM EXAM OFF
WK 4	Clinic Dental	Clinic Dental	Clinic Trauma	Clinic Trauma	Clinic Trauma	Clinic Trauma	AM EXAM OFF
WK 5	Clinic Trauma	Clinic Trauma	Clinic Trauma	Clinic Trauma	Clinic Trauma	Clinic CV	AM EXAM OFF
Wk 6	Clinic GU	Clinic GU	Clinic Musc/Skel	Clinic Musc/Skel	Clinic STUDY	MID-TERM EXAMS	OFF
Wk 7	Clinic Eye	Clinic ENT	Clinic Infect. Disease	Clinic Infect. Disease	Clinic Peds	Clinic Peds	AM EXAM OFF
WK 8	Clinic Peds	Clinic Peds	Clinic MCH	Clinic MCH	Clinic MCH	Clinic MCH	AM EXAM OFF

Freedom Medicine EP Schedule; p.2

	SAT	SUN	MON	TUE	WED	THU	FRI
WK 9	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	AM EXAM
	Nut.	Nut.	Nut.	Neuro.	Anemia	Endocrine	OFF
WK10	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	AM EXAM
	Skin	Immun-ization	Env. Health	Env. Health	Health Teaching	Health Teaching	OFF
WK11	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	
	Inpt. Mgmt.	Sterility	Mental Health	----------PRACTICAL REVIEW----------			OFF
WK12	Clinic	Clinic	STUDY	----COMPREHENSIVE FINAL EXAMS--------			
	Clinic Mgmt.	Mine Awareness	STUDY				

FILENAME:SCHEDEP5.FM

FREEDOM MEDICINE
EXPANDED PARAMEDIC TRAINING PROGRAM
MASTER SCHEDULE

	SAT	SUN	MON	TUE	WED	THU	FRI
WK 1	New EP arrives	Orient/ Stdy Hbts					OFF
WK 2							OFF
WK 3	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	OFF
WK 4	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	OFF
WK 5	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	OFF
Wk 6	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	OFF
Wk 7	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	OFF
WK 8	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	OFF

	SAT	SUN	MON	TUE	WED	THU	FRI
WK 9	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	
							OFF
WK10	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	
							OFF
WK11	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	
							OFF
WK12	Clinic	Clinic					

FILENAME:SCHEDULE.FM

FREEDOM MEDICINE EXPANDED PARAMEDIC TRAINING PROGRAM
EP5 CLINICAL CURRICULUM/OBJECTIVES

INTRODUCTION

In keeping with the Freedom Medicine philosophy of competency based training, close attention will be paid to the actual demonstration and mastery of clinical skills. To this end, detailed demonstration and continuous diagnostic evaluation of EP5 students clinical skills will be done. This means that daily evaluation by trainers will be used to diagnose the students strengths and weaknesses and immediate steps at remediation of student deficiencies will be instituted.

This practice will avoid the common problem of mid-level health worker training programs, namely; graduating students who score well on examinations but who have little demonstrated clinical competence. A handbook of skills checklists covering the basic diagnostic and therapeutic techniques needed by midlevel health workers has been developed. It is translated into Farsi (see attached Skills Checklist Handbook); this handbook will be in constant use as a training guide and evaluation tool.

CLINICAL ROTATIONS

There will be four clinical rotations; Dental, Clinic, Emergency Room, and Ward. Each rotation will have a standardized procedure for trainers and students to follow (see attached Student Teaching Guidelines).

Dental: 6 Half-Days

Since Freedom Medicine has no dental service of its own, dental training is done off campus at the local International Rescue Committee Dental Clinic. Emphasis is on practical clinical skills. The dental trainer will be oriented to Freedom Medicine's competency based training philosophy and will supply daily written evaluations in the students Green Books. The training site will be visited by Training Staff frequently to monitor the quality of instruction.

Clinic: 18 Half-Days

This rotation will take place in Freedom Medicine's Outpatient Clinic. Each trainer will supervise two or at most three students at a time. Patient numbers will be closely controlled by triage so that students and trainers will have ample time for quality teaching and learning. No more than 15 patients per trainer will ever be admitted during training. In this rotation the emphasis is on clinical diagnosis of the common medical problems of men, women and children the students will see inside Afghanistan. Appropriate medical therapy using the CMC Formulary, the avoidance of polypharmacy, and in depth patient education will be stressed. History and physical skills checklists will be used by students and trainers continuously.

FILENAME:EPCURINT.HND

Emergency Room: 18 Days

This rotation, utilizing Freedom Medicine's very busy Emergency Room, will provide the student a significant amount of practical experience managing common medical and surgical emergencies. Dressing changes, sterile technique, suturing, splinting, IV therapy, injections, local anesthesia, incision and drainage of abcesses, wound management, the passage of nasogastric tubes and urinary catheters will all be done by students under the direct supervision of trainers. Unless the patient requires immediate intervention, all procedures will be done by students according to the appropriate skills checklist. Medical patients will be treated using the same teaching procedure guidelines used in the clinic.

Ward: 18 Days

This rotation, in the Freedom Medicine Hospital, will provide the students with experience in inpatient management and nursing skills. Students will have ample time to practice physical diagnosis, as patients admitted to the hospital will all have positive findings that the students can examine at leisure without the inherent time pressures of a busy clinic or emergency room. As much as good patient care permits, the students will be responsible for all treatments, medications, vital signs, dressing changes and other care needed. If the patient requires surgery, a student will accompany him to observe sterile technique and see his patients' pathology directly. Students will attend daily teaching rounds, a portion of which will be specifically geared to the midlevel health workers' level.

In order to provide clinical training in the performance of circumcision, ward students will attend a weekly Circumcision Clinic. During this clinic, held on an outpatient basis, the students will observe and perform circumcisions under the direct supervision of the Freedom Medicine Staff Surgeon.

EVALUATION OF TRAINING

Evaluation of Knowledge Base:

This component of EP training will be evaluated by weekly written examination. Exams will cover the immediate past weeks' lecture topics. A passing score will be 70% or greater. Students scoring less than 70% will be required to attend an immediate tutorial covering the topics which they have failed to master. If the student does not demonstrate mastery of the subject to the satisfaction of his Student Advisor and the Training Coordinator, further remedial work will be scheduled and /or the student will be asked to leave the program. This will depend on how deficient the student is and his overall standing and progress.

FILENAME:EPCURINT.HND

Evaluation of Skills:
The basic clinical skills of vital signs, history & physical examination and nursing procedures will be tested via a series of clinical practical examinations. These will be given at the start, middle and end of the course. Students will be expected to use the Skills Checklists Handbook; acceptable performance will be 95% proficiency. Unsatisfactory students will receive an intensive tutorial. Students exhibiting continued unsatisfactory performances will be dismissed.

Diagnostic and patient care skills will be continuously evaluated by the trainers as the students move through the various clinical rotations. In the clinic, evaluation will consist of numerical scoring for each patient (see Student Teaching Guidelines) plus specific written comments regarding deficiencies. These will be rcorded daily in each student's Green Book. Scores and comments will be reviewed each week by the Student Advisor. A weekly average score will be computed and collated by the Training Coordinator.

Evaluation during the Emergency Room clinical rotation will consist of the standard numerical scoring for each patient written in the students' Green Book. In addition, students will be scored for patient care procedures such as dressing changes, suturing, and other invasive therapy using the Skills Checklist Handbook.

On the Ward rotation students will be evaluated on the accuracy of physical diagnosis and ability to accurately follow the patients' clinical progress. Clinical procedures performed on inpatients will also be evaluated. Results will be entered in each student's Green Book for weekly review and summarization by his Student Advisor.

WEEKLY STUDENT EVALUATION CONFERENCE

At the beginning of each week of EP5 training, a student evaluation conference of all trainers will be held. This conference will be chaired by the Training Coordinator. Each Student Advisor will bring his students' Green Book and Skills Checklist Handbook to the conference. The progress of each student and any problems he is experiencing will be discussed by the entire Training Staff. The students' written examination scores as well as clinical performance will be reviewed with the goal of quickly identifying learning deficiencies. Thus as problems occur, either in the areas of knowledge or skills, they can be noted and tutorial sessions immediately planned.

An additional benefit of these weekly sessions will be a common knowledge of each students' progress. Since every member of the Training Staff will participate, all will know of every students' training needs, and appropriate, individualized training can take place.

FILENAME:EPCURINT.HND

CLINICAL_SKILLS_HANDBOOK

INTRODUCTION

Welcome to **FREEDOM_MEDICINE**. The EXPANDED PARAMEDIC PROGRAM is meant to review all of the basic training that you have already had and also teach you new skills that will be of great use to you as you care for the people of Afghanistan.

SKILLS_CHECKLISTS

This HANDBOOK is yours to keep. You should have it with you whenever you are treating patients during the program, and you should use for a guide when you are working inside Afghanistan. You should also use it as a study guide, and practice the skills checklists with other students constantly until you can do **ALL** the skills checklists perfectly without any mistakes. If you can not do all the skills checklists perfectly by the end of the program **YOU_WILL_NOT_GRADUATE**.

This HANDBOOK will serve two purposes for you during the EXPANDED PARAMEDIC PROGRAM. First, you should use it as an exact guide for examining and treating your patients. You will perform the procedures EXACTLY as the HANDBOOK tells you; this is the correct procedure that the trainers want you to learn. Second, the HANDBOOK will serve as a way that the trainers and you can judge how well you are learning. The trainers will use the skills checklists to watch you when you are with a patient and give you a grade or score on how well you followed correct procedure. This way both you and the trainers will know exactly how well you are learning the best way to treat patients. If you can not do a skill correctly according to the checklist, then this tells you that you should practice this skill over and over until you can.

This is how you will use the HANDBOOK. When you are ready to do a procedure on a patient, look up the skills checklist that tell you how to correctly perform that procedure. For example, if your patient needs a nasogastric tube, turn to NASOGASTRIC TUBE INSERTION skills checklist. Review the checklist, find the supplies you will need, and tell your trainer you are ready to do the procedure. Next, give your HANDBOOK to the trainer. He will watch you as you do the procedure, and if you need help or do something which is not correct he will stop you and show you the correct way. That way, you will know right away if you make a mistake and can learn the correct way.

When you have finished the procedure, the trainer will give you a score or grade of Pass or Fail on the MASTER CHECKLIST and put his initials there. He will write in comments on how well you did and which parts of the procedure you need to practice. When you meet with your Student Advisor, he will read your MASTER CHECKLIST to find out how well you are learning clinical skills. If you need help learning a skill, your Student Advisor will arrange for you to get extra teaching.

YOU are responsible for getting a trainer to watch you and give you a score on your MASTER CHECKLIST when you do a procedure. Each week you should have many chances to get checked. If you do not use the checklists and have nothing new in your MASTER CHECKLIST for each week then the trainers will think that you are not doing any work and you will FAIL.

Do not worry if at first you can not do all the skills checklists correctly. This is a school; if you already knew everything perfectly you would not need to be here! But, you should get better and better each week. If you do not get better and better each week your Student Advisor will arrange for extra help, but you should know that students who do not get better after extra help are asked to leave the program.

CLINICAL_TEACHING_GUIDELINES
These GUIDELINES tell you and your trainers exactly what to do during the three clinical rotations, the EMERGENCY ROOM, CLINIC and WARD. When you begin a rotation you should read the GUIDELINES for that rotation and follow them exactly. For example, in CLINIC you should do exactly what the GUIDELINES tell you; and the same is true for the EMERGENCY ROOM and WARD rotations.

You will notice that for each patient that you see you will receive a grade or score from 1 to 4. Just like the skills checklists, this lets both you and the trainers know how well you are learning. This score is to let you know if you are learning as you should or if you need to do more work and study. It also tells you where you need to study harder. For example, if you look at your GREEN_BOOK and see that you always make a 1 or 2 on patients with gastrointestinal problems, this means that you should study that section of your book and get extra help from your Student Advisor. You are here to learn, and the scoring system lets you and the trainers know what areas or skills that you need to learn better.

YOU are responsible for following these GUIDELINES exactly and getting a trainer to write in your GREEN_BOOK or CLINICAL_SKILLS_HANDBOOK. If a trainer does not follow the GUIDELINES, please remind him very politely to do so.

STUDENT_ADVISOR
You will have one of the doctors on the training staff assigned as your Student Advisor. You will meet with him each week and he will look at your GREEN_BOOK and CLINICAL_SKILLS_HANDBOOK. He will also go over the written test you had the week before. You and he will talk about how you are doing in the program and work on any problems with learning you might have.

You should use your Advisor as an extra teacher assigned just for you. If you do not understand something in the program then ask him to help you learn it. Also, if you have any problems of any kind with other students, trainers or hospital staff then you should tell your Advisor and he will help you.

FREEDOM MEDICINE EXPANDED PARAMEDIC TRAINING PROGRAM
CLINICAL TEACHING GUIDELINES
General Information

Clinical skills training requires two things; that the student do the required work himself, but also that he is closely watched and evaluated to make sure that he is learning and performing each skill correctly. This philosophy means that the students, whenever possible, are actually responsible for everything that is done for each patient.

Students learn very little by watching the trainers do something. They learn much more by doing things themselves under the guidance of a good trainer. At first students must be shown how to perform a particular skill, but then they must do the skill themselves over and over again to become proficient and confident.

We limit the number of patients seen daily in the clinic, so the students, not the trainers do the work. The students need to continually take histories, do physical examinations, make diagnoses and make a treatment plan. They may make errors and they may take a long time to finish, but if they do not get a lot of practice here they will not be ready to work in Afghanistan.

To pass information from one person to another requires that the people speak the same technical language. Most students do not speak the "medical language" that is spoken by doctors. It is important for trainers to remember this. We must use the terms and diagnoses that the students are familiar with. Those are the ones in the CMC Manual and WHO Guidelines. We must not use advanced medical terms that the students do not know and cannot use. For example, we should say "brain swelling" instead of "cerebral edema". It is absolutely necessary that all trainers use the same terminology, and that must be the terminology of the CMC Manual and WHO Guidelines.

A good way to teach students is to ask them questions about their patients to make them think about differential diagnoses and treatments. It is very important to ask the student "What else could this be?" and "Why did you pick this medicine to treat this patient?". The trainers should always remember that the students will be working inside Afghanistan and that they will not have laboratories or x-rays to help them. Therefore the trainers should teach students how to treat the patient without the help of lab tests and x-rays. This does not mean that the trainers should not use these tests. It only means that every time trainers order tests they should also teach the students what to do when the tests are not available.

Finally, it is most important for the trainers to teach by example. The students will watch the trainers and do just as we do. So, as trainers, we must always be extra careful to set the best example. Since we want the students to do careful and complete histories and physical exams, we must always do these ourselves. If we want the students to treat us, and the patients, with kindness and respect we must treat them this way also. If we want the students to perform procedures correctly we must never deviate from our own checklists.

The following are guidelines for teaching in Clinic, Ward and ER. Trainers are responsible for following these guidelines exactly and should not deviate from them unless the patient will be harmed.

TRAINERS WILL BE PRESENT AND OBSERVE STUDENTS ANY TIME THEY ARE WITH A PATIENT. THERE WILL BE NO EXCEPTIONS. NO STUDENT WILL PERFORM ANY PROCEDURE AT ANY TIME UNLESS HE IS UNDER THE DIRECT SUPERVISION OF A TRAINER.

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STUDENT_CLINIC_PROCEDURE_GUIDELINES

1. HISTORY----------1,2,3 RECORDED ON FORM
2. VITAL SIGNS
3. PHYSICAL EXAM----------DOUBLE-CHECKED BY TRAINER
4. DISCUSS FINDINGS WITH TRAINER
5. GIVES PROBABLE DIAGNOSIS----------RECORDED ON FORM
6. DISCUSSES DIFFERENTIAL DIAGNOSIS---------RECORDED ON FORM
7. CHECKS FORMULARY; PRESCRIBES----------RECORDED ON FORM
8. EXPLAINS RATIONALE TO TRAINER
9. WRITES Rx
10. PICKS UP MEDS FROM PHARMACY
11. TEACHES PATIENT ABOUT MEDS AND DIAGNOSIS-OBSERVED BY TRAINER
12. FILLS IN GREEN BOOK
13. TRAINER SCORES STUDENT OF EACH PATIENT SEEN; RECORDS IN GREEN BOOK, USING FOLLOWING SCALE:

    1 = DIAGNOSIS INCORRECT
    2 = DIAGNOSIS CORRECT, TREATMENT INCORRECT
    3 = DIAGNOSIS CORRECT, TREATMENT CORRECT, BUT NO PATIENT ADIVCE GIVEN
    4 = DIAGNOSIS, TREATMENT, AND PATIENT ADVICE CORRECT

    A RATING OF 4 IS ACCEPTABLE PERFORMANCE.

14. AT END OF CLINIC TRAINER NOTES PROBLEMS, SPECIAL NEEDS, ACCOMPLISHMENTS IN GREEN BOOK FOR ADVISORY SESSION.

FILENAME:STUGUIDE.HND

STUDENT EMERGENCY ROOM GUIDELINES

1. AS NEW PATIENTS ENTER THE ER, A STUDENT WILL BE ASSIGNED TO BE RESPONSIBLE FOR THAT PATIENT.
2. STUDENTS MAY WORK AS A TEAM, BUT ONE STUDENT WILL BE PERSONALLY RESPONSIBLE FOR THE PATIENT AND HIS CARE.
3. THIS STUDENT WILL COMPLETELY EVALUATE THE PATIENT FOLLOWING THE CLINIC PROCEDURE GUIDELINES AND THE TRAINER WILL DISCUSS,TEACH AND SCORE JUST AS IN THE CLINIC.
4. FOR CRITICALLY ILL PATIENTS, THE DOCTOR ON-CALL WILL TREAT THE PATIENT AS NEEDED FOR PROPER PATIENT CARE, BUT A STUDENT WILL BE ASSIGNED TO FOLLOW THE PATIENT AND IF POSSIBLE EVALUATE AND PERFORM ANY NECESSARY PROCEDURES.
5. NURSING STAFF IN THE ER ARE CONSIDERED TRAINERS AND WILL AT ALL TIMES TEACH STUDENTS CORRECT PROCEDURES.
6. IF A PATIENT NEEDS TREATMENT OF ANY KIND, THE STUDENT ASSIGNED TO THE PATIENT WILL PERFORM THE TREATMENT UNDER THE DIRECT AND CONSTANT SUPERVISION OF A TRAINER, USING THE CLINICAL SKILLS HANDBOOK. THE TRAINER WILL ENTER A SCORE OF PASS/FAIL IN THE HANDBOOK.
7. AN EMERGENCY ROOM RECORD WILL BE COMPLETED AND GIVEN TO ANY PATIENT WHO NEEDS IM OR IV TREATMENT OR WHO WILL BE ASKED TO RETURN FOR FOLLOW-UP.
8. DRESSING CHANGE PATIENTS WILL EACH HAVE AN EMERGENCY ROOM RECORD COMPLETED AND SIGNED BY THE ON-CALL DOCTOR. STUDENTS WILL IN EVERY CASE REFER TO THE ER RECORD AND TAKE A HISTORY AND PERFORM A LIMITED PHYSICAL EXAMINATION RELATED TO THE INJURY.
9. BEFORE COMPLETING THE DRESSING CHANGE, THE STUDENT WILL DISCUSS THE CASE WITH A TRAINER AND MAKE A TREATMENT PLAN.
10. EVERY DRESSING CHANGE PATIENT IS A TEACHING CASE. STUDENTS ARE NOT TO BLINDLY CHANGE DRESSINGS WITHOUT EVALUATING THE PATIENT AND DISCUSSING THE CASE WITH A TRAINER.
11. ALL ER PROCEDURES DONE BY STUDENTS WILL BE UNDER THE DIRECT AND CONSTANT SUPERVISION OF A TRAINER. THERE WILL BE NO EXCEPTIONS.
12. AS A RULE, ALL PROCEDURES AND TREATMENTS IN THE ER WILL BE DONE BY STUDENTS.
13. DURING TIMES THE ER IS NOT BUSY, TRAINERS WILL REVIEW CLINICAL SKILLS CHECKLISTS WITH STUDENTS.

FILENAME:STUGUIDE:HND

STUDENT WARD PROCEDURE GUIDELINES

1. A WARD STUDENT WILL BE ASSIGNED TO EACH WARD PATIENT BY THE WARD NURSE.
2. THIS STUDENT WILL DO A HISTORY AND PHYSICAL EXAM ON HIS PATIENTS AND DISCUSS HIS FINDINGS WITH THE PATIENTS' DOCTOR. THIS WILL BE SCORED ON THE USUAL 1 TO 4 SCALE AND RECORDED IN THE GREEN BOOK.
3. THE STUDENT WILL DO ALL NECESSARY PROCEDURES AND TREATMENTS FOR HIS PATIENTS, INCLUDING VITAL SIGNS.
4. THE STUDENT WILL VISIT HIS PATIENT DAILY BEFORE TEACHING ROUNDS. HE WILL:
   A. ASK THE PATIENT ABOUT HIS PROGRESS AND IF THE PATIENT HAS ANY NEW COMPLAINTS.
   B. DO A REPEAT PHYSICAL EXAMINATION AS RELATED TO THE PATIENTS' PROBLEM AND ANY NEW COMPLAINTS.
   C. MAKE A TREATMENT PLAN FOR ALL THE PATIENTS' PROBLEMS.
5. THE STUDENT WILL WRITE DAILY PROGRESS NOTES IN HIS PATIENTS' CHART.
6. EVERY DAY BEFORE TEACHING ROUNDS THE STUDENT WILL MEET WITH THE ON-CALL DOCTOR TO DISCUSS HIS PATIENT. ON THE BASIS OF STEP 4 ABOVE, HE WILL BE SCORED BY THE ON-CALL DOCTOR AS FOLLOWS:

   1 = CORRECTLY NOTES NEW COMPLAINTS
   2 = CORRECTLY NOTES PHYSICAL FINDINGS
   3 = MAKES CORRECT TREATMENT PLAN
   4 = CORRECTLY DOES ALL OF THE ABOVE

7. THE STUDENT WILL ATTEND MORNING ROUNDS AND WILL BE EXPECTED TO ANSWER SIMPLE QUESTIONS ABOUT HIS PATIENTS' DIAGNOSIS AND TREATMENT.
8. WHEN PERFORMING PROCEDURES ON HIS PATIENTS, THE STUDENT WILL BE SCORED USING THE CLINICAL SKILLS HANDBOOK.
9. DURING TIMES THE WARD IS NOT BUSY, TRAINERS WILL REVIEW CLINICAL SKILLS CHECKLISTS.

FILENAME:STUGGUIDE.HND

INFORMATION ON INJECTIONS:

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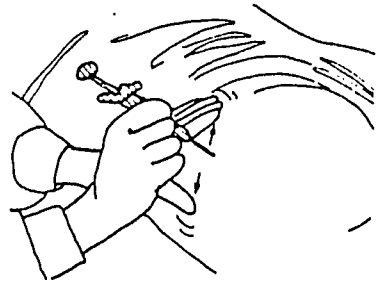
Intramuscular Injections:

Intramuscular injections must be given deep into large muscles.
Always inject at 90 degrees to the skin surface.
Always stretch the skin over the injection site.
In case of blood return: Pull needle back 1-2cm, and re-insert it at a slight angle. Check for blood return again.



Three muscles are large enough for IM injections:

1. Shoulder
2. Buttock
3. Thigh

FOR INFANTS:

Never inject the shoulder until the child is 4 years old. ALWAYS USE THE THE THIGH UNTIL THE CHILD HAS WALKED FOR ONE YEAR!

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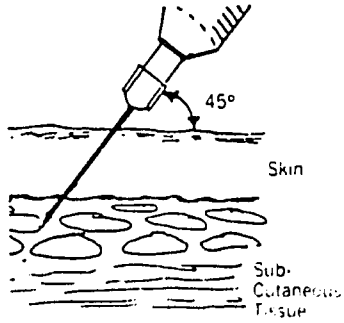
Subcutaneous Injections:

Subcutaneous injections are given into the fat layer between the skin and muscle.
Always inject at 45 degrees to the skin surface
Always pinch up a fold of skin over the site
In case of blood return: Pull needle back 1-2cm, and re-insert it at a slight angle. Check for blood return again.



Three body areas have thick fat over the muscle:

1. Back off upper arm.
2. Outer thigh.
3. Lower abdomen.

No difference between children and adults.

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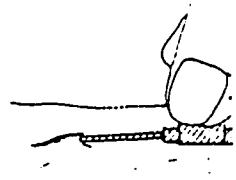
Intradermal Injections:

Intradermal injections are given between skin layers.
Always inject at the shallowest possible angle to the skin surface.
Always stretch the skin over the injection site.
Only insert the needle far enough to cover the hole in the end of the needle.



DO NOT ASPIRATE FOR BLOOD RETURN
A blister must appear instantly aftter injection.
If no blister comes up, the injection was subcutaneous.

No difference between children and adults.

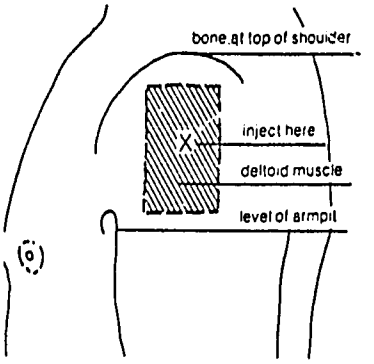
INTRAMUSCULAR INJECTION SITES

Shoulder:

The shoulder muscle CANNOT be used for injections over 1cc.

Measure 3 finger widths down from the joint at the top of the shoulder.

Inject into the middle of the muscle (thickest part).



Buttocks:

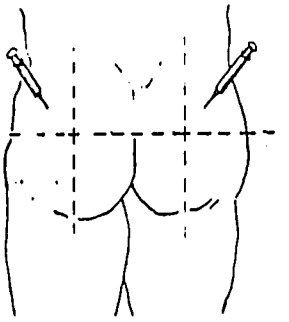
For Adults;

The buttocks can be used for injections up to 2.5cc.

For a 5cc injection, 2.5cc will be given in each buttock.

Divide the buttock into 4 equal quarters.

Inject into either upper-outer quarter.



Thigh:

For Adults:

The thigh muscle can be used for injections up to 2.5cc.

For a 5cc injection, 2.5cc will be given in each thigh.

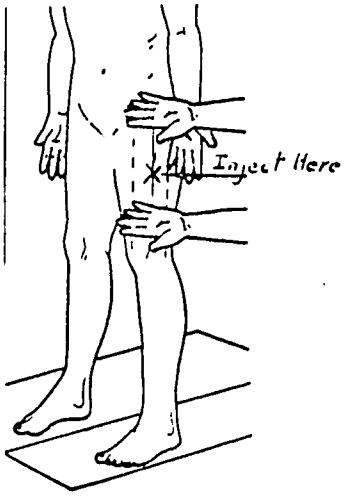
For Infants:

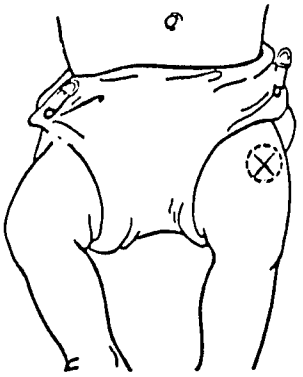
Inject maximum of 1cc in each thigh.

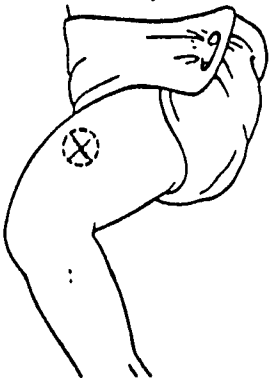
Draw a line from hip to knee on front of thigh. Draw a line from hip to knee on outside of thigh.

Measure one hand width above the knee, and one hand width below the hip.

The line halfway between the first 2 lines and between the hands is where to inject.







SUBCUTANEOUS INJECTION SITES

Back Of Upper Arms:

Halfway between shoulder and elbow.

Always pinch up a thick roll of skin over the site.

Outer Thigh:

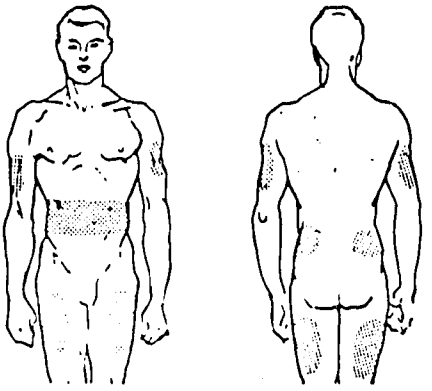
Halfway between hip and knee.

Always pinch up a thick roll of skin over the site.

Lower Abdomen:

Between the level of the umbilicus and pubic bone.

Always pinch up a thick roll of skin over the site.



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INTRADERMAL INJECTION SITES

Inside Of Lower Arm:

Halfway between wrist and elbow.

DO NOT inject over a vein.

Blister must appear at injection site instantly.

Circle injection site with a pen immediately after injection.

DO NOT rub injection site.

CLINICAL SKILLS HANDBOOK
MASTER LIST OF CHECKLISTS

1. Dosage calculation: Adult
2. Dosage calculation: Child
3. Administration of oral medications
4. Administration of IM injections
5. Administration of SQ injections
6. Administration of ID injections
7. Irrigation of ear
8. Administration of eye medications
9. Intravenous infusion set-up
10. Intravenous infusion starting
11. Intravenous infusion management
12. Discontinuing intravenous infusion
13. Hand washing
14. Sterile technique
15. Wound care/sterile dressing change
16. Local anesthesia
17. Suturing
18. Incision and drainage of abscesses
19. Clinical teaching guidelines
20. Student clinic procedure guidelines
21. Student emergency room guidelines
22. Student ward guidelines
23. Bladder catheterization
24. Instrument sterilization
25. Nasogastric tube insertion
26. History and physical examination for children
27. History and physical examination for adults
28. Information on injections

FILENAME:MASTSKL.HND

1.1master.skl

DOSAGE CALCULATION

ADULT:

	Y	N
1.) Questions patient regarding allergies or drug sensitivities	____	____
2.) If female patient; Questions whether patient is pregnant	____	____
3.) Refers to CMC formulary:		
A. Confirms prescription is indicated for diagnosis and is safe if patient is pregnant	____	____
B. Confirms dosage and frequency	____	____
C. Confirms route of administration (inj, oral, etc)	____	____
D. Confirms how given (with food, empty stomach, time of day)	____	____
4.) Teaches patient B,C,D above	____	____
5.) Administers medication properly (refer to appropriate administration check-list)		

COMMENTS:

Signature;_____ Date;_____

FILENAME: CHEKLST.SKL

DOSAGE CALCULATION
CHILD:

	Y	N
1.) Questions parent or attendant:		
A. Confirms childs' age	____	____
B. Questions regarding allergies or drug sensitivities	____	____
2.) Refers to CMC formulary:		
A. Confirms prescription is indicated	____	____
B. Confirms dosage, frequency and safety FOR AGE	____	____
C. Confirms route of administration (inj, oral,etc)	____	____
D. Confirms how given (with food, empty stomach, time of day)	____	____
3.) Teaches parent or attendant B,C,D above	____	____
4.) Administers medication properly (refer to appropriate administration check list)		

COMMENTS:

Signature;_____ Date;_____

FILENAME: CHEKLST.SKL

ADMINISTRATION OF ORAL MEDICATIONS

	Y	N
1.) Wash hands.....	____	____
2.) Tablet or Capsule: Dispenses proper number aseptically.....	____	____
3.) Syrup: Measures proper dosage by capful or syringe aseptically.....	____	____
4.) Teaches patient all of above information for home administration.....	____	____

FILENAME:CHEKLST.SKL

ADMINISTRATION OF OPTHALMIC MEDICATION

	Y	N
1.) Wash hands.....	____	____
2.) Tell patient what you will do & teach attendant or patient if necessary.....	____	____
3.) Cleans dirt & drainage from around eye.....	____	____
4.) Has patient tilt head back & look up.....	____	____
5.) Pulls lower lid down to form pocket between eyeball and lid.....	____	____
6.) For ointment:		
A. Applies 1-2 cm line of ointment to pocket without touching eyeball.....	____	____
B. Instructs patient to close eye and move eyeball in all directions.....	____	____
C. Wipes drainage from around eye.....	____	____
7.) For drops:		
A. Hold dropper 2 cm above pocket.....	____	____
B. Put drops in outer corner of pocket (away from nose).....	____	____
C. Has patient close eye gently & keep head tilted back for 1 minute.....	____	____
D. Wipes drainage from around eye.....	____	____

COMMENTS:

Signature;_____ Date;_____
FILENAME:CHEKLST.SKL

ADMINISTRATION OF IM INJECTION

	Y	N
1.) Wash hands.....	____	____
2.) Tell patient what you're doing.....	____	____
3.) Selects proper syringe & needle for medication, site, dosage.....	____	____
4.) Selects proper injection site:		
A.) For patient age: Adult: Deltoid muscle; 3 finger widths below AC process Buttocks; upper outer quadrant Thigh; Vastus Lateralis muscle outer quadrant halfway between knee and hip Infant: thigh as in adult		
B.) For medication dosage: Arm: 1cc or less Buttock or Thigh: up to 2.5ml.....	____	____
5.) Unwraps & assembles needle/syringe aseptically	____	____
6.) Draws up correct dosage of medication without contamination.....	____	____
7.) Clears all air bubbles from syringe.....	____	____
8.) Cleans injection site properly with alcohol..	____	____
9.) Allows alcohol to dry before injection.....	____	____
10.)Stretches skin over injection site.....	____	____
11) Inserts needle to the hub with quick stab, at 90 degree angle to skin surface.....	____	____
12) Checks for blood return (starts over if present).....	____	____
13) Injects medicine slowly.....	____	____
14) Removes needle from skin with quick, straight motion.....	____	____
15) Covers site with clean cotton & applies pressure, rubbing gently.....	____	____
16) Disposes of needle & syringe properly.....	____	____

FILENAME:CHEKLST.SKL

ADMINISTRATION OF SQ INJECTION

	Y	N
1.) Wash hands.....	____	____
2.) Tell patient what you're doing.....	____	____
3.) Selects proper syringe & needle for medication, site & dosage.....	____	____
4.) Selects proper injection site (outer upper arm, thigh, buttock, lower abdomen)	____	____
5.) Unwraps & assembles needle/syringe aseptically.....	____	____
6.) Draws up correct dosage of medication without contamination.....	____	____
7.) Clears all air bubbles from syringe.....	____	____
8.) Cleans injection site properly with alcohol	____	____
9.) Allows alcohol to dry before injection.....	____	____
10) Pinches up roll of skin at injection site..	____	____
11) Inserts needle with bevel up 1.5 cm at 45 degree angle to skin surface with one quick stab.....	____	____
12) Checks for blood return (starts over if present).....	____	____
13) Injects medication slowly.....	____	____
14) Removes needle from skin with straight, quick motion.....	____	____
15) Covers injection site with clear cotton, & applies pressure, rubbing gently.....	____	____
16) Disposes of needle & syringe properly.....	____	____

COMMENTS:

Signature:_____ Date:_____
FILENAME:CHEKLST.SKL

ADMINISTRATION OF ID INJECTION

	Y	N
1.) Wash hands.....	_____	_____
2.) Tell patient what you're doing.....	_____	_____
3.) Selects tuberculin syringe & needle.....	_____	_____
4.) Selects proper injection site (inside forearm)	_____	_____
5.) Unwraps & assembles needle & syringe without contamination.....	_____	_____
6.) Draws up correct amount of medication without contamination.....	_____	_____
7.) Clears all air bubbles from syringe.....	_____	_____
8.) Cleans injection site properly with alcohol.	_____	_____
9.) Allows alcohol to dry before injection.....	_____	_____
10) Draws skin flat over injection site.....	_____	_____
11) Inserts needle with bevel up at 10 degree angle to skin surface only far enough to cover needle hole.....	_____	_____
12) Does NOT check for blood return.....	_____	_____
13) Injects 0.1 ml medication to form skin blister	_____	_____
14) Removes needle with quick straight motion.....	_____	_____
15) Does NOT rub site.....	_____	_____
16) Cirles site with pen and tells patient to wait for sensitivity check.....	_____	_____
17) Disposes of needle & syringe correctly.....	_____	_____

COMMENTS:

Signature:_____ Date:_____

FILENAME:CHEKLST.SKL

IRRIGATION OF EAR

	Y	N
1.) Wash hands.....	____	____
2.) Tell patient what you will do.....	____	____
3.) Clean dirt, drainage from outer ear.....	____	____
4.) Prepare warm irrigation fluid & syringe.....	____	____
A. Has patient sit upright with affected ear tilted slightly down.....	____	____
B. Have patient hold basin under ear.....	____	____
C. Pulls ear gently up & back (down & back for young children).....	____	____
D. With syringe gently injects fluid without blocking outflow.....	____	____
E. Repeats D until ear canal is clear.....	____	____
F. Dries external ear & surrounding area....	____	____
5.) Prepares warm glycerin if necessary.....	____	____
A. Has patient lie down with affected ear up.	____	____
B. Uses syringe to drip 1 ml glycerin into ear canal.....	____	____
C. Waits 10 minutes then proceeds with step 4 above.....	____	____

COMMENTS:

Signature;_____ Date;_____

FILENAME:CHEKLST.SKL

INTRAVENOUS INFUSION SET-UP

	Y	N
1.) Wash hands.....	____	____
2.) Obtains proper IV solution, pole, tubing.....	____	____
3.) Closes tubing control.....	____	____
4.) Removes covers & connects tubing to solution without contamination.....	____	____
5.) Hangs bag on pole securely.....	____	____
6.) Fills drip chamber 1/3 full properly.....	____	____
7.) Fills tubing with fluid and clears any bubbles without contaminating tubing end or cover.....	____	____

COMMENTS:

Signature;_____ Date;_____
FILENAME:CHEKLST.SKL

INTRAVENOUS_INFUSION_STARTING

	Y	N
1.) Wash hands.....	____	____
2.) Tell patient what you're doing.....	____	____
3.) Selects proper needle, prepares plaster and calculates drip rate.....	____	____
4.) Selects infusion site, cleans it with alcohol..	____	____
5.) Applies constricting band	____	____
6.) Opens needle package & holds needle without contamination.....	____	____
7.) Inserts needle bevel up, pirces vein & obseves blood return.....	____	____
8.) Removes constricting band.....	____	____
9.) Connects tubing to needle without contamination	____	____
10) Opens fluid control and observes site for fluid flow and vein rupture.....	____	____
11) Secures tubing with plaster.....	____	____
12) Rechecks fluid flow rate.....	____	____

COMMENTS:

Signature;_____ Date;_____
FILENAME:CHEKLST.SKL

INTRAVENOUS_INFUSION_MANAGEMENT

	Y	N
1.) Confirms IV solution and flow rate orders.....	____	____
2.) Checks flow by counting drip rate for a FULL minute at least q H and prn.....	____	____
3.) Checks infusion site for infiltration and inflammation at least q H and prn.....	____	____
4.) Replaces serum bag before drip chamber empties	____	____

COMMENTS:

Signature:_____ Date:_____

FILENAME:CHEKLST.SKL

DISCONTINUING INTRAVENOUS INFUSION

	Y	N
1.) Wash hands.....	____	____
2.) Tell patient what you're doing.....	____	____
3.) Closes tubing clamp.....	____	____
4.) Removes plaster from patient.....	____	____
5.) Covers site with clean cotton and removes needle/catheter slowly.....	____	____
6.) Applies pressure to IV site until bleeding stops.....	____	____
7.) Applies small dressing to IV site.....	____	____
8.) disposes of all materials properly.....	____	____

COMMENTS:

Signature;_____ Date;_____

FILENAME:CHEKLST.SKL

Hand Washing

Contaminated hands are the primary cause of cross infection. Hand washing is the most important and basic technique for controlling the spread of infection.

It is impossible to sterilize your hands (to kill all the microbes) so you must make them as clean as possible by thoroughly washing your hands.

Proper hand washing helps prevent you from acquiring infections, as well as from spreading infection to others.

Hand Washing Checklist

	YES	NO
1. Does the student wet hands and lower arms thoroughly with water?	___	___
2. Does the student keep hands and forearms lower than elbows during washing. (The hands are the most contaminated parts to be washed. Water flows from the least to the most contaminated area.)	___	___
3. Does the student wash hands with plenty of soap, lather, and friction?	___	___
4. Does the student interlace his fingers and rub palms and back of hands with a circular motion, for 2 minutes?	___	___
5. Does the student rinse with plenty of clean water?	___	___
6. Does the student wash his hands in the following situations:		
a. Before and after caring for a patient, especially one with an infection?	___	___
b. Before and after performing invasive procedures such as IV'S, injections, catheterizations, or dressing changes?	___	___
c. After touching organic material (food, dirt, blood, stools, urine, or other living things)?	___	___
d. After using the toilet?	___	___
e. After handling contaminated equip-equipment?	___	___
f. Before preparing medicines?	___	___
g. Before going off duty?	___	___

FILENAME:CHEKLST.SKL

Checklist for Use of Sterile Gloves

1. Does the student wash his hands thoroughly, using a scrub brush?	___	___
2. Does the student take care not to touch the gloves as he opens the wrapper?	___	___
3. Does the student grasp only the inside surface of the cuff of the glove?	___	___
4. Does the student carefully pull the glove over the hand, leaving a cuff, and being sure the cuff does not roll up the wrist?	___	___
5. Are the thumb and fingers in the right place? Does the student avoid adjusting the glove with the unsterile hand?	___	___
6. Does the student slip the fingers of the gloved hand underneath the other glove cuff?	___	___
7. Does the student maintain the sterility of the gloved hand? The gloved hand should not touch exposed skin as the second glove is pulled on.	___	___
8. Once the gloves are on, does the student take care to avoid contamination?		
- Avoids pulling up a cuff that has rolled down	___	___
- Keeps gloved hands above waist level	___	___
- Turns head away from the sterile field when talking, sneezing, or coughing.	___	___

FILENAME:CHEKLST.SKL

STERILE_TECHNIQUE

Y/N

Principles of Asepsis

1. Washes hands before and after each patient?
2. Keeps sterile and non-sterile objects separate?
3. If sterility in doubt, considers object NON-STERILE?
4. Aware that:
   a. sterile touching sterile = sterile
   b. sterile touching non-sterile = non-sterile
   c. sterile drape becomes wet = non-sterile
5. Discards contaminated instruments immediately?
6. Never places non-sterile object(such as his hand) on sterile field?
7. Never reaches across sterile field; does not cough, sneeze, or talk unnecessarily?
8. Never turns back to sterile field?
9. When wearing sterile gloves, keeps hands away from all non-sterile objects and keeps hands ABOVE waist?

Opening Sterile Packs

1. Faces sterile field, leaving at least 30 cm between his body and sterile field?
2. Opens pack by starting with the flap away from his body first, then the side flaps, then the near, touching only the outside wrapper?

Opening Individually Wrapped Sterile Supplies

1. Inspects package for rips which may mean contamination?
2. Grasps package by extended edges?
3. Peels along sealed edges, using downward motion?
4. Does not touch inside wrapper?
5. Lets contents of package fall on sterile surface or be taken by person wearing sterile gloves?

Putting On Sterile Gloves

1. Inspects package for rips which may mean contamination?
2. Opens glove package on clean dry surface?
3. Position glove package so that right side is at the right hand?
4. Touching only the INSIDE surface of the right glove and using the left hand, picks up the right glove?
5. While keeping the hands above the waist, inserts the right hand into the glove; takes care to touch only the INSIDE of the glove?
6. Picks up the left glove by inserting the tips of the gloved hand under the OUTSIDE of the cuff?
7. Inserts the fingers of the left hand into the glove, pulls up gloves without contaminating either glove?
8. Adjusts gloves to fit comfortably without contaminating either glove?

COMMENTS/NEEDS_REVIEW?

SIGNATURE_____DATE_____

FILENAME:STERILE.SKL

WOUND CARE/STERILE DRESSING CHANGE

Y/N

1. Washes hands?
2. Tells patient what he is doing?
3. Removes and properly discards old dressing?
4. Evaluates wound for proper healing, signs of infection, abscess, retained foreign body, granulation tissue, contracture or need for debridement?
5. If wound and surrounding skin are not clean, uses simple soap and water to thoroughly clean?
6. Opens sterile instrument pack aseptically; picks up basin THROUGH sterile wrapping; empties basin and pours saline or other solutions without contamination?
7. Again using the sterile pack wrapping to maintain sterile technique, picks up clamp, forceps and gauze?
8. Wets gauze with saline; swabs directly over wound FIRST then swabs surrounding skin and discards gauze; NEVER touches wound after touching surrounding skin?
9. Repeats #3 until wound thoroughly cleaned?
10. Debrides dead tissue as needed using forceps and scissors?
11. Correctly maintains sterile field at all times?
12. Correctly applies sterile dressing?
13. Based on #4 above, correctly makes treatment plan?
    a. prescribes appropriate antibiotics if indicated
    b. advises patient when to return
    c. other care as needed; hot soaks, elevation, etc.

COMMENTS/NEED REVIEW?

SIGNATURE_____DATE_____

FILENAME:WNDCR.SKL

LOCAL_ANESTHESIA

Y/N

1. Washes hands?
2. Tells patient what he is doing?
3. Prepares 1% lignocaine solution by adding 5 ml of sterile water to 5 ml of 2% lignocaine?
4. Aware that MAXIMUM dose of lignocaine is 4mg/kg and that 1 ml of 1% lignocaine contains 10 mg lignocaine and that 1 ml of 2% lignocaine contains 20 mg lignocaine?
5. Correctly calculates maximum lignocaine dosage for this patient and does not exceed dosage?
6. Using smallest gauge needle available(25 gauge preferred) and beginning at end of wound, inserts needle subcutaneously INSIDE the wound and aspirates for blood return; if no blood return injects SLOWLY observing for swelling of wound edge?
7. Injects entire wound, aspirating carefully for blood return on each needle insertion?
8. Waits 1 minute and checks for anesthesia with needle touch; if anesthesia not satisfactory after 3-5 minutes reinjects using same technique as above?
9. Aware that lignocaine anesthesia should last 30-60 minutes?
10. Aware that complications of lignocaine anesthesia include allergic reactions, shock and seizures?

COMMENTS/NEEDS_REVIEW/

SIGNATURE_____DATE_____

FILENAME:LOCANES.SKL

SUTURING

Y/N

1. Washes hands?
2. Tells patient what he is doing?
3. Prepares equipment:
   a. local anesthesia
   b. suture
   c. sterile instrument pack
   d. sterile drape
   e. Betadine or other solution
   f. sterile gloves?
4. Selects correct suture and needle for wound?
   a. Silk or nylon(non-absorbable) for skin
   b. Chromic or Vicryl(absorbable) for subcutaneous
   c. 4-0 or smaller for face
   d. 2-0 or larger elsewhere
   e. Cutting needle for skin use only; tapered needles for use anywhere
5. Correctly positions patient so that he is comfortable, wound is exposed and in good light, and that there is NO tension on wound?
6. Anesthetizes wound properly(see LOCAL ANESTHESIA)?
7. Opens sterile instrument pack aseptically; places suture, Betadine and sterile drape on sterile field correctly?
8. Correctly puts on sterile gloves?
9. Cleans wound with Betadine solution; discards instrument used for skin preparation?
10. Correctly applies sterile drape?
11. Debrides wound as needed?
12. Correctly grasps needle with needle holder approximately in the middle of the needle and at tip of needle holder?
13. Using forceps, picks up edge of wound to be sutured?
14. Places suture about 1 cm from wound edge?
15. Places first suture in middle of wound?
16. Needle enters skin at 90 degree angle; pushes needle through skin with rotation of wrist?
17. Picks up needle with forceps or needle holder and pulls through skin?
18. Correctly ties square knots(instrument or hand tie)?
19. Approximates wound edges so they are just touching without gaps or puckering of wound; places sutures at least 0.5 cm apart?
20. Cleans wound of blood and Betadine?
21. Applies clean dressing?
22. Correctly instructs patient?
   a. keep wound dry
   b. keep dressing clean
   c. return in 3 days unless pain, bleeding, reinjury or wet/dirty dressing
23. Aware that facial sutures should be removed in 5 days; all others after 10 days?

COMMENTS/NEEDS REVIEW?

SIGNATURE_____DATE_____

FILENAME:SUTURE.SKL

INCISION_AND_DRAINAGE_OF_ABSCESS

Y/N

1. Washes hands?
2. Tells patient what he is doing?
3. Prepares equipment:
   a. sterile instrument pack
   b. knife handle if available
   c. scalpel blade
   d. sterile drape
   e. rubber drain if available
   f. Betadine and saline solutions
   g. sterile syringe(10 or 20 ml)?
4. Correctly positions patient so that he is comfortable, the abscess is exposed and in good light?
5. Opens sterile instrument pack aseptically; places scalpel blade, knife handle, rubber drain, and sterile drape on sterile field correctly; pours Betadine and saline without contamination?
6. Correctly puts on sterile gloves?
7. Cleans wound with Betadine; discards instrument used for skin preparation?
8. Correctly applies sterile drape?
9. Using clamp, inserts scalpel blade onto knife handle; uses clamp to hold scalpel blade if handle not available?
10. Uses scalpel to cut directly downward into abscess?
11. Makes incision the width of the abscess and in the direction of lines of skin tension?
12. Using clamp, opens abscess to ensure complete drainage?
13. Using syringe and saline, irrigates abscess cavity until no pus is returned with irrigation?
14. Inserts rubber drain into bottom of abscess?
15. Cleans skin?
16. Applies bulky dry dressing?
17. Correctly instructs the patient:
    a. keep wound and dressing clean and dry
    b. return in two days or sooner if pain, fever, bleeding or wet/dirty dressing
18. Prescibes appropriate antibiotics for 5-7 days?
19. Aware that drain should be removed in two days?
20. Properly disposes of contaminated material?
21. Washes hands?

COMMENTS/NEED_REVIEW?

SIGNATURE_____DATE_____

FILENAME:I&D.SKL

BLADDER_CATHETERIZATION

Y/N

1. Washes hands?
2. Prepares catheter, drainage bag, instruments, syringe, sterile water, plaster, gloves, and Betadine aseptically?
3. Tells patient what he is doing?
4. Has patient lie on his back?
5. Washes patients' penis and surronding area with soap and water?
6. Puts on sterile gloves or uses only sterile instruments to handle catheter?
7. Holds penis in left hand, retracts foreskin if present?
8. With right hand, cleans head of penis with Betadine-soaked cotton gauze three times without contamination?
9. Lubricates tip of catheter with sterile lubricant?
10. Holds shaft of penis straight up with left hand(touches only sterile items with right hand)?
11. Inserts tip of catheter into urethra. Touches catheter ONLY with right hand or sterile clamp?
12. Using right hand or sterile clamp, advances catheter 2 cm. AFTER urine comes out?
13. Inflates catheter balloon tip with sterile water and pulls gently on catheter to make sure it won't come out of bladder?
14. Connects catheter to drainage bag?
15. Tapes catheter to patients' leg to prevent pulling on it?
16. Cleans patient and area; washes hands?

COMMENTS/NEEDS REVIEW?

SIGNATURE_____DATE_____

FILENAME:NRSSKLS.SKL

NASOGASTRIC TUBE INSERTION

Y/N

1. Washes hands?
2. Tells patient what he is doing?
3. Positions patient in semi-reclining position?
4. Examines and questions patient to determine which nostril has the best air flow?
5. Uses NG tube to measure from the tip of patients' nose to earlobe, then down to the tip of the patients' sternum?
6. Marks measured length on NG tube with piece of plaster?
7. Lubricates tip of tube?
8. Puts tube into nostril with best air flow?
9. Has patient look down and swallow a little water while pushing NG tube in?
10. Advances NG tube all the way to correct length marked before with plaster?
11. Checks placement of tube by one or more of following methods:
    a. Aspirates NG tube with syringe; if yellow fluid returns NG tube is in stomach.
    b. Puts stethoscope over stomach and listens as air is injected into NG tube; if bubbling air is heard NG tube is in stomach.
    c. Puts end of NG tube in water; if bubbles are seen, NG tube is NOT in the stomach?
12. Removes and reinserts NG tube if it is not in stomach?
13. Uses plaster to secure NG tube to patients' nose?

COMMENTS/NEED REVIEW?

SIGNATURE_____DATE_____

FILENAME:NRSSKLS.SKL

INSTRUMENT STERILIZATION

Y/N

A. Washes all instruments with soap and water AND soaks in Savlon 4% solution before sterilizing?
B. Opens all hinged instruments such as scissors and clamps?

Autoclave
1. Places metal tray in bottom of autoclave?
2. Puts 1/2 liter of water in autoclave?
3. Puts instruments on top of metal tray?
4. Attaches top of autoclave and heats over fire or stove?
5. Puts the weight on the steam hole AFTER steam comes out for 2 minutes?
6. Reduces heat when autoclave begins to whistle?
7. Cooks autoclave for another 15 minutes?
8. AFTER 15 minutes, takes autoclave from heat source and lets it cool?
9. CAREFULLY removes weight when most of pressure is gone?
10. Removes top of autoclave when NO steam comes out?

Boiling
1. Uses container with a cover?
2. Adds enough water to cover instruments?
3. Heats water to full boil BEFORE putting instruments in?
4. Wraps glass items individually in gauze?
5. Boils instruments for **AT LEAST 30 MINUTES** with cover of container on?
6. Does **NOT** add more water **OR** instruments after boiling has begun?

Formol Tablets
1. Uses metal container with **TIGHTLY** fitting cover?
2. Wraps proper number of Formol tablets in gauze and attaches them to the inside of cover(2-3 for small tin, etc)?
3. Places instruments into container?
4. Seals container well?
5. Labels outside of container with date and time?
6. Places container in sun or by fire for 6-8 hours; if inside with no heat source for 24 hours?

Antiseptic
1. Soaks instruments in undiluted Savlon for 15 minutes or **MORE**?
2. Rinses instruments in **STERILE** water before use?

COMMENTS/NEEDS REVIEW?

SIGNATURE_____DATE_____

FILENAME:NRSSKLS.SKL

MEDICAL HISTORY SKILLS CHECKLIST

CHIEF COMPLAIN/HISTORY OF PRESENT ILLNESS Y/N

1. Asks patient why he has come to clinic?
2. Asks patient exactly where symptoms(SX) are located?
3. Asks patient when SX started and how long? Getting better or worse?
4. Asks patient what SX are like; severe or not?
5. Asks patient what makes SX better or worse?
6. Asks patient if he's had same SX before?
7. Asks patient if other family members have or have had same SX?
8. Asks about previous treatment; what was it; did it help? Is patient taking any meds now?
9. Asks if patient has any other SX?
10. Always asks women if they are pregnant?

PAST/FAMILY/SOCIAL

1. Asks about previous sickness such as malaria, TB, typhoid, others?
2. Asks about previous hospitalization or surgery?
3. Asks about immunizations?
4. Asks about allergies to medicines or other things?
5. Asks about any sicknesses that run in the family?
6. Asks about habits: cigarettes, naswar, chillum, sharbat(alcohol), charas(hashish) or opium?
7. Asks about living conditions, water source and sanitation?

REVIEW OF SYSTEMS

GENERAL

1. Asks about weight loss/gain? Weakness? Trouble with sleep?

EYES

1. Asks about pain, trauma, itching, pus, redness, loss of sight or night blindness?

EAR/NOSE/THROAT

1. Asks about pain, discharge or pus, fever, trauma, loss of hearing or trouble swallowing?

NECK

1. Asks about swollen glands, goiter or stiffness?

CHEST

1. Asks about cough, fever, sputum color and duration, if any blood in sputum, shortness of breath, or pain with breathing?

CARDIOVASCULAR

1. Asks about chest pain with activity, palpitations or irregular beats, inability to sleep lying flat, swelling of feet or legs?

FILENAME:MEDHX.SKL

GASTROINTESTINAL
1. Asks about nausea, vomiting, diarrhea or constipation?
2. Asks about heartburn, gas, or abdominal pain?
3. Asks about blood in vomit or stool?
4. Asks about worms. jaundice, change in appetite, and effect of eating on SX?

GENITOURINARY
1. Asks about problems with urination: pain, frequency, blood or pus in urine or retention?
2. Asks about kidney pain, impotence, genital itching or discharge?

MUSCULOSKELETAL
1. Asks about bone or joint pain, stiffness, redness, swelling or trauma?

SKIN
1. Asks about itch, rash or lesions, change in color or sensation?

NEUROLOGIC
1. Asks about headache, trauma, unusual sensations or numbness, convulsions, dizziness, blurred vision, depression or anxiety?

COMMENTS/NEEDS_REVIEW_IN_SPECIFIC_AREAS?

SIGNATURE_____DATE_____
FILENAME:MEDHX.SKL

HISTORY AND PHYSICAL EXAMINATION
CHILD

PAST/FAMILY HISTORY
1. Asks about previous illness?
2. Asks about immunizations?
3. Asks about illness in family?
4. Asks about problems at birth?
5. Asks about normal development:
   Smiles at 6 weeks?
   Sits alone at 9 months?
   Walks alone at 18 months?
   Speaks first words at 21 months?
   Uses sentences at 36 months?
6. Asks about nutrition:
   Number of meals?
   Amounts and kinds of foods?
   Breast-fed? How long? How weaned?

VITAL SIGNS
Weight
1. Obtains accurate weight in kg using hanging scale if 15 kg or less?

Temperature
1. Obtains accurate temp as per VITAL SIGNS CHECKLIST?
2. Uses rectal site in children under 4 years old, if crying, very ill
   or unconscious?

Pulse
1. Obtains accurate rate using brachial or apical site?
2. Aware of normal values: newborn 140/minute
   less than one year 120/minute
   more than one year 80-100/minute?

Respirations
1. Observes rise and fall of chest for a full minute while child is
   not crying; obtains accurate result?
2. Notes wheezing, coughing, stridor or retractions?
3. Aware of normal values: newborn 30-40/minute
   less than one year 20-30/minute
   more than one year 20/minute

MUAC(MID-UPPER ARM CIRCUMFERENCE)

1. Measures all children ages 1 to 5 years?
2. With childs arm hanging at side, chooses point halfway between shoulder and elbow?
3. Using tape measure firmly around arm but not tight enough to make wrinkles in skin, obtains correct measurement?
4. Recognizes and records normal/abnormal findings:
   normal 14 cm or more
   12.5 to 13.5 cm moderate malnutrition
   12.5 cm or less severe malnutrition?

PHYSICAL EXAMINATION

General Preparation

1. Allows child to remain on parents lap?
2. Soothes and quiets child; if needed stops exam and allows parent to quiet child?
3. Leaves parts of exam which will make the child cry til last?
4. Has equipment for exam ready?

GENERAL APPEARANCE

Y/N

1. Looks at child and decides if child is healthy, acutely ill, chronically ill or very ill?
2. Looks for signs of dehydration, malnutrition, abnormal crying, weakness injury and fever?
3. Looks at skin color, hydration, wounds, infections, rashes and hair?
4. Recognizes if eyes are pale, sunken, jaundiced, red or any drainage?

HEAD/NECK

1. Palpates fontanelles(soft spot) and notes if sunken as in dehydration or full and tense as in meningitis?
2. Palpates neck for enlarged lymph nodes, goiter or stiffness?

CHEST/CARDIOVASCULAR

1. Looks for retractions at neck and chest?
2. Feels for enlarged heart?
3. Auscultates lungs and heart?

ABDOMEN

1. Inspects, auscultates, percusses and palpates as for adult?
2. Feels amount of abdominal fat to check for malnutrition?
3. Pinches abdominal skin to check for dehydration?

EARS/THROAT

1. Examines these last?
2. Has parent hold child securely?
3. Examines as for adult?

COMMENTS/NEED REVIEW IN SPECIFIC AREAS?

SIGNATURE_____

DATE_____

PHYSICAL EXAMINATION SKILLS CHECKLIST

Y/N

PREPARATION
1. Explains procedure to patient?
2. Ensures adequate privacy during examination?
3. Has all equipment ready before beginning:
   Thermometer
   BP cuff
   Watch with second hand
   Stethoscope
   Otoscope
   Tongue depressors
   Alcohol or appropriate sterilizer
   MUAC band for patients aged 1-5 years
   Scales-adult/infant?
   Lubricant

GENERAL APPEARANCE
1. Examines the patient with eyes and common sense and notes whether the patient appears:
   Very sick or only a little sick
   Underweight or malnourished
   Dehydrated
   Pale, jaundiced or cyanotic?
2. Recognizes and records abnormal findings?

VITAL SIGNS
Temperature
1. Ensures thermometer is cleaned with alcohol or other sterilizer?
2. Selects oral or rectal thermometer?
3. Shakes thermometer so that mercury is below 37C?
4. Selects oral route in conscious adults and older children and axillary or rectal route in younger children, mouth-breathers, and unconscious adults?
5. Aware that axillary temperature is one degree lower that the oral temperature and that the rectal temperature is one degree higher?
6. Correctly places thermometer under the tongue and has the patient close lips around it for 3 minutes for oral temperature and places thermometer in armpit and clamps arm down to the side for 5 minutes for axillary temperature; lubricates thermometer and inserts in rectum to have parent hold for 5 minutes for rectal temperature?
7. Obtains correct value?
8. Aware that 38C is fever and 40C is high fever?

Pulse

1. Selects correct location to obtain pulse:
   Radial pulse in adults and apical or brachial in c ldren?
2. Locates pulse by placing pads of index and middle ingers over appropriate area?
3. Counts pulse for 15 seconds using second hand of watch?
4. Obtains correct value? Y/N
5. Evaluates pulse for regularity and fullness?
6. Aware that more than 100 or less than 60 beats/minute is abnormal?

Respirations

1. Observes the rise and fall of the patients chest for 60 seconds using a watch?
2. Obtains correct value?
3. Notes depth of breathing and whether there is intercostal reractions or nasal flaring?
4. Aware that less than 12 or more than 24 breaths/minute is abnormal?

Blood Pressure

1. Checks that BP cuff is in good working order with no air leaks and a working control valve?
2. Selects correct size of BP cuff so that the cuff width is 1/2 the circumference of arm?
3. Positions the patients arm slightly flexed and comfortably supported?
4. Bares the antecubital area and locates the brachial pulse?
5. Places the cuff snugly and securely over the upper arm with the cuff bladder over the brachial pulse?
6. Places the stethoscope over the brachial pulse and inflates the cuff to no more than 220 mmHg; slowly releases the control valve. Notes the beginning(systolic pressure) and end(diastolic) of the beats?
7. Obtains correct value?
8. Aware that more than 100 mmHg diastolic and less than 100 mmHg systolic is abnormal?

HEAD

1. Explains procedure?
2. Inspects size and shape?
3. Palpates for swelling, depressions, breaks in the skin, or tenderness?
4. In infants, notes shape and condition of fontanelle?

EYES

1. Explains procedure?
2. Tests vision in each eye by having patient cover one eye and read Green book at arms length; if patient cannot read uses shapes or fingers at same distance?
3. Using a torch, observes both eyes for symmetry, swelling or discoloration of surrounding tissues?
4. Inspects the eyelids for swelling, redness or rashes?
5. Using a torch, inspects the inner surface of both upper and lower lids for pus, redness or lumps. Everts the upper lid using a cotton swab as needed?
6. Using a torch, inspects the sclera(white) for redness, discoloration or foreign body?
7. Using a torch to light the cornea at an angle, inspects for cloudiness or other lesions?
8. Using a torch, checks the pupil reaction to light; notes whether they respond equally? Y/N
9. Using a torch, inspects the lens for clearness?

EARS

1. Explains procedure?
2. Inspects the skin of the outer ear for rashes or bumps?
3. Notes whether pulling up on the ear or pressing on the tragus causes pain?
4. Inspects and palpates the mastoid area for redness, tenderness and swelling?
5. Examines the ear canal and TM by pulling up on the ear and inserting the otoscope a short distance?
6. Able to identify bony landmarks of the TM as well as perforation, bulging, redness or retraction?
7. Recognizes cerumen impaction, pus or discharge in canal?
8. Tests hearing separately in each ear using ticking watch or rubbing fingers together?

NOSE/SINUSES

1. Explains procedure?
2. Inspects each nostril for obstruction, pus, discharge or bleeding?
3. Using the otoscope and large speculum, inspects the nasal lining for redness, pus, bleeding or abnormal structures?
4. Palpates and percusses over frontal, ethmoid and maxillary sinuses for tenderness?

THROAT/MOUTH

1. Explains procedure?
2. Inspects the mouth using a torch and tongue depressor; notes redness of gums, cavities in teeth or discoloration of tongue?
3. Using the torch and tongue depressor, inspects the throat for swelling, redness, pus, or tonsil enlargement?

NECK

1. Explains procedure?
2. Inspects for enlarged nodes or goiter?
3. Palpates entire neck for nodes or other masses?
4. Palpates thyroid gland by standing behind patient and placing hands gently on lower part of the neck over and around the trachea; asks patient to swallow and notes movement of thyroid and any masses or enlargement?
5. Inspects neck veins for distention while patient sitting upright?
6. Evaluates stiffness by having patient touch chin to chest?

CHEST

1. Explains procedure
2. Inspects for abnormal shape, uneven expansion, intercostal muscle retraction, or masses?
3. Palpates for tenderness or crepitus?
4. Percusses anterior, posterior and lateral lung fields bilaterally for dullness or hyperresonance?
5. Auscultates anterior, posterior and lateral lung fields bilaterally Y/N by asking the patient to take slow deep breaths through an open mouth; listens to at least one full breath in each location and after patient coughs; compares each side; recognizes rales, rhonchi and wheezes?

CARDIOVASCULAR

1. Explains procedure?
2. Palpates and compares carotid, radial and dorsalis pedis(or posterior tibialis) bilaterally?
3. Inspects neck veins for distention while patient sitting upright?
4. Inspects anterior chest to locate apical pulse?
5. Palpates anterior chest to locate apical pulse; notes heart enlargement if lateral to midclavicular line?
6. Auscultates the heart for at least one minute noting whether heart tones are dual,normal rate and rhythm, and presence/absence of extra sounds?
7. Inspects and palpates legs for edema?

FILENAME:PE.SKL

ABDOMEN

1. Explains procedure?
2. Standing at the patients right side, correctly positions patient lying on his back with knees flexed and feet flat on table with arms at his side?
3. Exposes abdomen and inspects for swelling, scars, movement and herniae?
4. Auscultates abdomen noting presence/absence and character of bowel sounds?
5. Asks patient to report tenderness during palpation?
6. Palpates all four quadrants for tenderness or masses?
7. With left hand under patient, palpates liver by moving right hand from RLQ to RUQ?
8. With left hand under patient, palpates spleen by moving right hand from LLQ to LUQ?
9. Using above two-hand technique, palpates both kidneys?
10. Percusses all four quadrants of the abdomen for organ enlargement, bladder distention, solid masses or abnormal intestinal air?
11. With patient sitting, percusses both CVA areas with fist for kidney tenderness?
12. Correctly notes normal/abnormal findings?

GENITALIA/ANUS(MALE)

1. Explains procedure?
2. Inspects genitalia for swelling, redness or discharge?
3. Palpates each testes and epididymus for tenderness or swelling?
4. Inserts finger in each external inguinal ring and has patient cough to check for herniae?
5. Using a torch, inspects anus for hemorrhoids, inflammation, fissures, fistulas or abscess?
6. Palpates anal area for tenderness?

MUSCULOSKELETAL

1. Explains procedure?
2. Evaluates range of motion in neck, shoulders, spine, elbow, wrists, hips, knees,hands and feet?
3. Inspects each of above for swelling, redness, and deformity?
4. Palpates each of above for tenderness, crepitus or warmth?

FILENAME:PE.SKL

NEUROLOGIC

1. Explains procedure?
2. Asks patient name, day of week and home village?
3. Has patient stand with eyes closed and arms outstretched?
4. Observes patients walk across room?
5. Compares strength of grip, arms and legs with each side and with his own?
6. Tests brachial, knee and heel jerks bilaterally?
7. Tests sensation to light touch and pinch bilaterally with patients eyes closed?
8. Palpates for nerve enlargement at neck, elbow, wrist, knee and ankle?
9. Recognizes normal/abnormal findings?

SKIN

1. Explains procedure?
2. Examines or attempts to examine patients entire skin?
3. Observes skin color?
4. Palpates skin texture?
5. Observes and palpates any skin lesions; accurately describes location, type, number and color?
6. Observes hair for abnormal loss, color, thickness, [illegible] lice?
7. Observes nails for abnormal shape or infection?

COMMENTS/NEEDS REVIEW IN SPECIFIC AREAS?

SIGNATURE_____ _____ DATE_____

FILENAME:PE.SKL

PRACTICAL_SKILLS_EVALUATION/REVIEW

Objectives: At the completion of this unit, the student shall be able to:

1. Perform and record an adult medical history, meeting the criteria in the Medical History Checklist.

2. Perform and record an adult physical examination, meeting the criteria in the Physical Examination Checklist.

3. Perform and record a child's medical history and physical examination, meeting the criteria in the Medical History and Physical Examination for Child Checklist.

4. Accurately determine the quantity and quality of patient pulse, respirations, temperature and blood pressure, meeting the criteria in the Measuring and Recording Patient Blood Pressure Checklist; Measuring, Evaluating and Recording Patient Pulse Checklist; Measuring and Recording Patient Temperature Checklist.

5. Accurately prepare and administer an IM injection, meeting the criteria in the Administration of IM Injection Checklist.

6. Accurately prepare and administer a subcutaneous injection, meeting the criteria in the Administration of SQ Injection Checklist.

7. Accurately prepare and administer an intradermal injection, meeting the criteria in the Administration of Intradermal Injection Checklist.

8. Accurately calculate the correct dosage of medication, meeting the criteria in the Doage Calculation Checklist.

9. Accurately prepare, start, manage and discontinue an intravenous infusion, meeting the criteria in the Intravenous Infusion Set-Up Checklist, Intravenous Infusion Starting Checklist, Intravenous Infusion Management Checklist, and Discontinuing Intravenous Infusion Checklists.

FILENAME:SKILLS.OBJ

10. Change dressings using sterile technique, meeting the criteria in the Dressing Change Checklist.

11. Demonstrate correct technique for application of ear medications and ear irrigation, meeting the criteria in the Irrigation of Ear and Application of Ear Medicine Checklist.

12. Demonstrate correct technique for the application of eye medication and irrigation of the eye, meeting the criteria in the Administration of Ophthalmic Medication and Eye Irrigation Checklist.

13. Demonstrate proper application of topical medication to the skin.

FILENAME:SKILLS.OBJ

PRACTICAL SKILLS EVALUATION/REVIEW : TEACHING PLAN 60 hours

1. Review History and Physical Examination, Adult.
   Lecture/demonstration by instructor. Practice by student. Final demonstration by student must meet criteria in History and Physical Examination Checklist, Adult.
   (CMC Manual p.1-3, FM Manual Chapter 7.)

2. Review History and Physical Examination, Child.
   Lecture/demonstration by instructor. Practice by student. Final demonstration by student must meet criteria in History and Physical Examination Checklist, Child.
   (FM Manual Ch.3 p.3-9)

3. Review vital signs, normal and abnormal T,P,R and B/P.
   Lecture/demonstration by instructor.Practice by student. Final demonstration by student must meet criteria in Measuring and Recording a Patient Blood Pressure Checklist; Measuring, Evaluation and Recording Patient Pulse Checklist; Measuring and Recording Patient Temperature Checklist.
   (FM Manual Ch. 1c p.4-5)

4. Review of IM, SQ and ID injections.
   Lecture/demonstration by instructor.Practice by student. Final demonstration by student must meet criteria in Administration of IM Injection Checklist, Administration of SQ Injection Checklist, and Administration of ID Injection Checklist.
   (Information on Injections Handout, FM Manual Ch.9 p. 13-17)

5. Review of setup, starting, maintaining and discontinuing IVs.
   Lecture/demonstration by instructor. Practice by student. Final demonstration by student must meet criteria in Intravenous Infusion Set-Up Checklist, Intravenous Infusion Starting Checklist, Intravenous Infusion Management Checklist, and Discontinuing Intravenous Infusion Checklist.
   (Handouts:Starting An IV, Diagram of Veins Used for IV, Scalp Vein IV in Child)

6. Review of Dressing Change.
   Lecture/demonstration by instructor. Practice by student. Final demonstration by student must meet criteria in Dressing Change Checklist.
   (FM Manual Ch.12 p.1-5)

NOTE: Specific areas of deficiency in the above skills will be identified and a remedial plan formulated for each student; if deficiencies are deemed too great, student will not be allowed to continue training.

FILENAME:SKILLS.LP

PHARMACOLOGY

Learning Objectives:

1. Knowledge - The student will:
   - 1.1 Demonstrate the understanding that not all disease can be treated or cured by medicines.
   - 1.2 Demonstrate understanding that medicines can be very dangerous.
   - 1.3 Describe the dangers of polypharmacy.
   - 1.4 Describe the correct use of the CMC manual.
   - 1.5 Explain accurate calculation of dosages for age/weight using the CMC manual.
   - 1.6 Identify the routes of medication administration ,i.e.:
     - oral,
     - sublingual,
     - rectal,
     - respiratory,
     - injection,
     - intravenous.
   - 1.7 Define drug absorption, distribution, and excretion.
   - 1.8 Define drug indication and contraindication.
   - 1.9 Define drug synergism and antagonism.
   - 1.10 Define drug resistance and explain selection of resistant organisms.
   - 1.11 Describe the signs and symptoms of drug allergies.
   - 1.12 Describe the testing method and treatment for drug allergies.
   - 1.13 Identify the information each patient must receive about each prescription, i.e.:
     - diagnosis,
     - dosage,
     - frequency,
     - duration.
   - 1.14 Describe the constituents of ORS.
   - 1.15 Identify and describe the constituents of different IV solutions:
     - NS,
     - D5W,
     - Lactated Ringers.
   - 1.16 Explain the importance of non-hazardous traditional remedies.

2. Skills - The student will:
   - 2.1 Demonstrate familiarity with and correct use of the CMC manual.
   - 2.2 Demonstrate accurate calculation of dosages for age/weight using the CMC manual.
   - 2.3 Demonstrate correct and thorough patient education.

FILENAME:PHARM.OLP

PHARMACOLOGY

Lesson Plan

1. Knowledge:
   - 1.1 Concepts of:
     - non-prescription treatments,
     - polypharmacy and its hazards.
   - 1.2 Definition of drug:
     - absorption,
     - distribution,
     - excretion,
     - indications,
     - contraindications,
     - synergism,
     - antagonism,
     - allergy,
     - resistance.
   - 1.3 Concepts of prescription:
     - diagnosis,
     - dosage,
     - frequency,
     - duration.
   - 1.4 CMC manual, its contents and use.
   - 1.5 Categories of medications in CMC manual.
   - 1.6 Concept and importance of thorough patient education.
   - 1.7 Non-hazardous treatment methods used locally.

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Discussion: solicit information and concepts of local treatment methods.
   - 2.3 Practice using CMC manual.
   - 2.4 Practice calculation of dosages for age/weight using CMC manual.
   - 2.5 Role-playing: demonstration of proper prescription and patient education.

3. Materials:
   - 3.1 CMC manual.
   - 3.2 FM textbook.
   - 3.3 HERC posters.
   - 3.4 Whiteboard.
   - 3.5 Case studies.

4. Skills:
   - 4.1 Familiarity with and correct usage of CMC manual and formulary.
   - 4.2 Accurate calculation of dosages for age/weight using CMC manual.
   - 4.3 Demonstrate proper and thorough patient education.

5. Evaluation:
   - 5.1 Written exam.
   - 5.2 Ongoing clinical evaluation.

FILENAME:PHARM.OLP

GASTROINTESTINAL SYSTEM

Learning Objectives

1. Knowledge - The student will:
   - 1.1 List all the organs in the gastrointestinal system.
   - 1.2 Describe the basic function of these parts of the G.I. system:
     - mouth,
     - esophagus,
     - stomach,
     - liver,
     - gallbladder,
     - pancreas,
     - small intestine,
     - large intestine,
     - rectum/anus.
   - 1.3 List the steps in the history and physical for a G.I. exam.
   - 1.4 Explain the normal findings of physical exam.
   - 1.5 Describe the differential diagnosis of diarrhea from:
     - virus,
     - bacteria,
     - parasites,
     - extra-intestinal infections,
     - chemicals,
     - allergy,
     - cholera.
   - 1.6 Describe the treatment and prevention of diarrhea resulting from:
     - virus,
     - bacteria,
     - parasites,
     - extra-intestinal infections,
     - chemicals,
     - allergy,
     - cholera.
   - 1.7 Describe signs, treatment, and prevention of dehydration including degrees of dehydration.
   - 1.8 Describe ORS preparation.
   - 1.9 Describe indications and applications of different rehydration therapies:
     - oral (ORS),
     - IV,
     - NGT.
   - 1.10 Describe differential diagnosis (signs and symptoms), transmission, prevention, and treatment of:
     - segmented worms (tapeworm),
     - non-segmented worms (roundworm, pinworm, hookworm, whipworm).

FILENAME:GI.OLP

1.11 Explain the signs and symptoms, treatment, and prevention of:
- typhoid,
- hepatitis, cirrhosis, and ascites,
- hemorrhoids,
- constipation,
- gastroenteritis,
- gastritis and peptic ulcer disease.

1.12 Describe the differential diagnosis, treament, and referral of upper and lower G.I. bleeding.

1.13 Describe the differential diagnosis (signs and symptoms), treatment, and referral for acute abdomen:
- appendicitis,
- cholecystitis,
- intestinal obstruction,
- intestinal perforation.

1.14 Explain dietary counseling for a G.I. patient including:
- diarrhea and dehydration,
- ORS preparation.

1.15 Explain indications/contraindications for use of an NGT.

2. Skills - The student will:

2.1 Demonstrate history and physical examination of a G.I. patient according to G.I. exam checklist.

2.2 Demonstrate commercial ORS preparation and teaching.

2.3 Demonstrate homemade ORS preparation and teaching.

2.4 Demonstrate basic dietary counseling.

2.5 Demonstrate NGT passage and care.

FILENAME:GI.OLP

GASTROINTESTINAL SYSTEM

Lesson Plan - Part 1

1.Knowledge:

1.1 Parts and function of each organ in the G.I. system.

1.2 Definitions of:
- digestion,
- absorption,
- elimination.

1.3 History and physical exam of a G.I. patient.

1.4 Techniques and location of:
- auscullation,
- percussion,
- palpation,
- observation.

1.5 Expected normal sounds/findings.

1.6 Possible abnormal findings.

1.7 Definition of diarrhea.

1.8 Describe the differential diagnosis of diarrhea from:
- virus,
- bacteria,
- parasites,
- extra-intestinal infections,
- chemicals,
- allergy,
- cholera.

1.9 Describe the treatment and prevention of diarrhea resulting from:
- virus,
- bacteria,
- parasites,
- extra-intestinal infections,
- chemicals,
- allergy,
- cholera.

1.10 Signs and symptoms of mild, moderate, and severe dehydration.

1.11 Treatment and prevention of dehydration.

1.12 Preparation of commercial and homemade ORS.

1.13 Administration of ORS.

1.14 Indications, contraindications, and applications of rehydration therapies:
- oral (ORS),
- IV,
- NGT.

1.15 Indications, contraindications, use, and care of an NGT.

FILENAME:GI.OLP

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Discussion.
   - 2.3 Identify and label a diagram of the digestive system.
   - 2.4 Demonstration/return demonstration of history and physical exam of a G.I. patient.
   - 2.5 Preparation of ORS.
   - 2.6 Demonstration/return demonstration of NGT passage.

3. Materials:
   - 3.1 Whiteboard.
   - 3.2 Unlabeled diagram of the G.I. system.
   - 3.3 Stethescope.
   - 3.4 Table.
   - 3.5 Water.
   - 3.6 Pot.
   - 3.7 Packet of ORS.
   - 3.8 Salt.
   - 3.9 Sugar.
   - 3.10 Spoon.
   - 3.11 Doll.
   - 3.12 NGT.
   - 3.13 Lubricant.
   - 3.14 Syringe.
   - 3.15 Saline solution.
   - 3.16 G.I. examination checklist.
   - 3.17 FM texbook.
   - 3.18 CMC manual.

4. Skills:
   - 4.1 Demonstrate history and physical exam of G.I. patient according to G.I. exam checklist.
   - 4.2 Demonstrate NGT passage and care.
   - 4.3 Demonstrate teaching and preparation of commercial and homemade ORS solution.

5. Evaluation:
   - 5.1 Written exam.
   - 5.2 Practical skills exam based on G.I. exam checklist.
   - 5.3 Evaluation of student-patient teaching in clinical practice.

FILENAME:GI.OLP

GASTROINTESTINAL SYSTEM

Lesson Plan - Part 2

1. Knowledge:
   - 1.1 Signs, symptoms, transmission, and treatment of:
     - segmented worms (tapeworm),
     - non-segmented worms (roundworm, pinworm, hookworm, whipworm).
   - 1.2 Signs, symptoms, prevention, and treatment of:
     - typhoid,
     - hepatitis, cirrhosis, and ascites,
     - hemorrhoids,
     - constipation,
     - gastroenteris,
     - gastritis and peptic ulcer disease.
   - 1.3 Differential diagnosis, signs, symptoms, treatment, and referral of:
     - upper G.I. bleeding,
     - lower G.I. bleeding.
   - 1.4 Signs, symptoms, treatment, and referral of acute abdomen:
     - appendicitis,
     - cholecystitis,
     - intestinal obstruction,
     - intestinal perforation.
   - 1.5 Dietary treatment and prevention of G.I. problems.

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Discussion.
   - 2.3 Demonstration of G.I. physical exam.

3. Materials:
   - 3.1 FM textbook.
   - 3.2 CMC manual.

4. Skills:
   - 4.1 Demonstrate history and physical exam of G.I. patient according to the G.I. exam checklist.
   - 4.2 Demonstrate dietary counseling of G.I. problems.

5. Evaluation:
   - 5.1 Written exam.
   - 5.2 Practical skills exam based on G.I. exam checklist.
   - 5.3 Evaluation of student-patient teaching in clinical practice.

FILENAME:GI.OLP

CIRCUMCISION

Learning Objectives

1. Knowledge - The student will:
   - 1.1 Explain indications and contraindications for circumcision.
   - 1.2 Explain the anatomy of the penis.
   - 1.3 Identify possible complications of circumcision.
   - 1.4 Explain follow-up care of the patient.
   - 1.5 Explain patient teaching of follow-up care.

2. Skills - The student will:
   - 2.1 Demonstrate sterile technique.
   - 2.2 Demonstrate antiseptic pre-op scrub.
   - 2.3 Demonstrate administration of local anesthesia.
   - 2.4 Demonstrate suturing.
   - 2.5 Demonstrate patient education.

FILENAME:CIRCUM.OLP

CIRCUMCISION

Lesson Plan

1. Knowledge:
   - 1.1 Indications for circumcision:
     - religious,
     - social,
     - hygienic.
   - 1.2 Contraindications for circumcision: general contraindications for surgery.
   - 1.3 Male genital anatomy.
   - 1.4 Anatomy and techniques for foreskin dissection.
   - 1.5 Prevention and treatment for possible complications of circumsion:
     - hemorrhage,
     - infection,
     - stricture,
     - anesthesia reaction.
   - 1.6 Patient education for wound care.
   - 1.7 Follow-up care.

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Assignment: Attendance and training at circumcision clinic.

3. Materials:
   - 3.1 Whiteboard.
   - 3.2 FM textbook.
   - 3.3 Handout: Circumcision.
   - 3.4 Skills checklists:
     - sterile technique,
     - local anesthesia,
     - suturing,
     - gloving.

4. Skills:
   - 4.1 Demonstrate sterile gloving and sterile instrument handling.
   - 4.2 Demonstrate local anesthesia.
   - 4.3 Demonstrate suturing.
   - 4.4 Demonstrate patient teaching.

5. Evaluation:
   - 5.1 Written exam.
   - 5.2 Follow-up practical evaluation in circumsion clinic.

FILENAME:CIRCUM.OLP

RESPIRATORY SYSTEM

LEARNING OBJECTIVES

By the end of this session, the students will be able to:

KNOWLEDGE

1.1 Identify and locate the structures of the respiratory system.
1.2 Describe the functions of the respiratory system.
1.3 List six symptoms pertinent to the medical history of respiratory illness.
1.4 Describe the physical examination of the respiratory system.
1.5 Explain the signs and symptoms, treatment, and prevention of transmission of:
    a. common cold
    b. asthma
    c. bronchitis
    d. pneumonia
    e. chronic obstructive pulmonary disease
        -chronic bronchtis
        -emphysema
    f. tuberculosis-referral
    g. lumg cancer-referral
1.6 Describe the approach to:
    a. cough
    b. chest pain
    c. shortness of breath
    d. sputum/hemoptysis

Skills

1.1 Perform a complete history and physical examination for the problems listed in 1.5 and 1.6 above.

FILENAME: respir.olp

RESPIRATORY SYSTEM

LESSON PLAN: RESPIRATORY PART 1

1. Knowledge
   - 1.1 Structure and function of the respiratory system/tree
   - 1.2 Medical history
     - a. is there cough? Duration?
     - b. is there sputum? Color? Blood?
     - c. is there fever?
     - d. is there shortness of breath?
     - e. is there chest pain?
     - f. other symptoms?
   - 1.3 Physical examination
     - a. inspection
     - b. palpation
     - c. percussion
     - d. auscultation
       - -rales
       - -rhonchi
       - -wheezes
   - 1.4 Signs and symptoms, treatment, prevention of transmission of:
     - a. common cold
     - b. asthma

2. Learning Activities:
   - 2.1 Lecture on knowledge component
   - 2.2 Discussion
   - 2.3 Demonstration of respiratory history and physical examination
   - 2.4 Identify and label a diagram of the respiratory system/tree
3. Materials:
   - 3.1 Board/marker
   - 3.2 Stethoscope
   - 3.3 Blank diagrams of resp. system for each student
   - 3.4 Large labeled diagram of resp. system
   - 3.5 FM, CMC texts
   - 3.6 Clinical Skills Handbook
4. Skills:
   - 4.1 Demonstrate history and physical examination of respiratory system
5. Evaluation:
   - 5.1 Written examination
   - 5.2 Skills practical examination

FILENAME: respir.olp

LESSON PLAN: RESPIRATORY PART 2

1. Knowledge:
   - 1.1 Signs and symptoms, treatment and prevention of transmission of:
     - a. bronchitis
     - b. pneumonia
     - c. chronic obstructive pulmonary disease
       - -chronic bronchitis
       - -emphysema
     - d. tuberculosis-referral
     - e. lung cancer-referral
   - 1.2 Approach to the patient with:
     - a. cough
     - b. chest pain
     - c. shortness of breath
     - d. sputum/hemoptysis
2. Learning Activities:
   - 2.1 Lecture/question & answer
3. Materials:
   - 3.1 Board/marker
   - 3.2 FM, CMC, and Clinical Skills Handbook
4. Skills:
   - 4.1 Demonstrate mastery of 1.1 and 1.2 above
5. Evaluation:
   - 5.1 Written examination
   - 5.2 Skills practical examination

FILENAME: respir.olp

DENTAL TEACHING PLAN 5 hours

1. Review of dental materials in kit:
   -dental forceps-right angle, angle and straight
   -dental probe, spoon, scaler, elevator, spatula
   -dental ZEO with clove oil
   -25 gauge long dental needles/syringes
   -Lidocaine 2%
   -Book: Where There Is No Dentist (WTND)

2. Review normal anatomy of the mouth, preventative techniques.
   Demonstration by instructor.
   (white board, models of tooth, mouth, brush, floss)

3. Review sterilization and storage of instruments in the field.
   Demonstration by instructor.
   (container, instruments, WTND p.82-85)

4. Review abnormal signs and symptoms in the mouth.
   Lecture: recognition and treatment.
   (slide projector, slides, WTND p.76-119, CMC Manual p.27-32)

5. Review procedures for scaling teeth.
   Demonstration by instructor. Practice by student.
   (instruments, model, WTND p.121-128)

6. Review sites and procedure for giving local anesthesia.

   Demonstration by instructor. Practice by student.
   (syringe, vial, 25 g. long dental needle, WTND p. 129-136)

7. Review filling of dental caries.
   Demonstration by instructor. Practice by student.
   (instruments, ZEO, model, WTND p.137-146)

8. Review drainage of abcess.
   Demonstration by instructor. Practice by student.
   (instruments, gauze, model, WTND p. 87-88)

9. Review tooth extraction procedure.
   Demonstration by instructor. Practice by student.
   (instruments, gauze, model, WTND p.147-155)

10. Review dental suturing.
    Demonstration by instructor. Practice by student.
    (suture, needle holder, needles, model, WTND p. 155-157)

11. Review management of root removal and post-extraction complications.
Lecture.
(WTND 159-161)

12. Review management of dislocated/broken jaw.
Demonstration. Student practice.
(WTND p.102-107)

TRAUMA

I. Unit 1: BASIC/NEW/OLD WOUND CARE

Learning Objectives: Upon completion of this unit, the student shall be able to:

1. Knowledge:
   - 1.1 List and define 5 types of wounds:
     - abrasions,
     - incisions,
     - lacerations,
     - avulsions,
     - punctures.
   - 1.2 Describe the difference between 'clean' and 'contaminated' wounds.
   - 1.3 List five types of wounds which should not be sutured and explain why:
     - bullet wounds,
     - combat wounds,
     - wounds more than four hours old,
     - wounds the paramedic is unable to clean,
     - bites or punctures.
   - 1.4 List the steps in treatment of wounds including:
     - control of bleeding,
     - evaluation of damage,
     - preparation of skin,
     - use of gloves/hand washing,
     - cleaning the wound,
     - cleaning/irrigating/debridement,
     - referral as needed.
   - 1.5 List and explain the steps in cleaning a wound.
   - 1.6 Define and explain the purpose of wound debridement.
   - 1.7 Explain how to identify tissue which needs to be debrided.
   - 1.8 Explain the importance of thorough cleaning and removal of all dead tissue.
   - 1.9 Explain the steps in the care of a wound after debridement including:
     - packing,
     - dressing,
     - correct taping,
     - changing dressings (schedule and irrigation),
     - elevation,
     - use of antibiotics.
   - 1.10 Explain what procedures should be used if the wound is over a broken bone.
   - 1.11 Explain on-going use of debridement in wound care.
   - 1.12 State the purpose of local anesthesia.
   - 1.13 State the desired strength and method of preparation of xylocaine.

FILENAME:TRAUMA1.OLP

1.15 State normal dosage and maximum dosage limits.
1.16 Explain the dangers of overdosage.
1.17 Explain the danger of injecting xylocaine into veins or arteries.
1.18 List and explain the steps of using xylocaine including:
- mixing solution,
- drawing up solution,
- placement of injection and testing for entry into blood vessel,
- injection,
- testing for anesthetic effects,
- length of expected effect.

2. Skills:
2.1 Demonstrate techniques for wound care including cleaning and debridement.
2.2 Demonstrate patient teaching of wound care at home.
2.3 Demonstrate administration of local anesthetic.
2.4 Demonstrate patient explanation to patients of the procedures.

FILENAME:TRAUMA1.OLP

TRAUMA

I. Unit 1: BASIC/NEW/OLD WOUND CARE

Lesson Plan:

1. Knowledge:
   - 1.1 Review of sterile technique and basic wound care.
   - 1.2 Review of 5 wound types:
     - abrasions,
     - incisions,
     - lacerations,
     - avulsions,
     - punctures,
   - 1.3 Differences between clean and contaminated wounds.
   - 1.4 Indications for suturing:
     - clean and less than four hours old.
   - 1.5 Indications for not suturing:
     - bullet wounds,
     - combat wounds,
     - wounds more than 4 hours old,
     - wounds unable to clean,
     - bites or punctures.
   - 1.6 Basic wound treatment:
     - control of bleeding,
     - evaluation of damage,
     - preparation of skin,
     - gloves/handwashing,
     - cleaning/irrigating/debridement,
     - referral if needed.
   - 1.7 Special considerations of war wounds:
     - gunshot wound pathology,
     - gunshot wound treatment.
   - 1.8 Techniques of debridement and irrigation:
     - importance,
     - wounds not healed by suturing but by cleaning,
     - characteristics of dead vs. viable tissue
     - arterial ligation if necessary.
   - 1.9 Reason and technique of local anesthesia:
     - purpose/ mechanism of action,
     - dangers of side effects and overdosage,
     - concept of maximum dosage of lidocaine 4 mg/kg,
     - calculation of maximum dosage using 1% and 2% lidocaine.

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Discussion.
   - 2.3 Demonstration/return demonstration.

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3. Materials:
    3.1 FM textbook.
    3.2 CMC manual.
    3.3 Skills checklists.
    3.4 Flip chart drawings.
    3.5 Dressing kits.
    3.6 Foam model for wound debridement.
    3.7 Syringes.

4. Skills:
    4.1 Demonstration of local anesthesia administration.
    4.2 Demonstration of wound debridement.
    4.3 Demonstration of patient explanation of precedures to be used.
    4.4 Demonstration of patient teaching of home care of wound.

5. Evaluation:
    5.1 Written exam.
    5.2 Practical exam according to skills checklists.
    5.3 Ongoing clinical evaluation according to skills checklists.

FILENAME:TRAUMA1.OLP

TRAUMA

I. Unit 2: Suturing and Wound Infection

SUTURING

Learning Objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

   1.1 Explain principles of suturing

   1.2 Explain schedule of suture removal.

   1.3 List and explain steps for suture removal.

2. Skills

   2.1 Demonstrate suturing during lab and in ER.

   2.2 Provide patient teaching re: procedure and signs of infection.

FILENAME:TRAUMA2B.OBJ

TRAUMA

I. Unit 2: Suturing and Wound Infection

PREVENTION AND TREATMENT OF WOUND INFECTION

Learning Objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

   1.1 List 11 factors which predispose to infection.

   1.2 Describe the best method of prevention of infection.

   1.3 List and give signs and symptoms of 2 types of infection.

   1.4 List and explain steps of treatment of wound infection including:
   a. opening and cleaning
   b. debridement
   c. antibiotic use

2. Skills

   2.1 Demonstrate treatment of wound infection if seen in clinical setting.

   2.2 Provide patient teaching re:
   a. prevention of infection
   b. signs of infection and need for care.

FILENAME:TRAUMA2A.OBJ

TRAUMA

I. Unit 2: Suturing and Wound Infection

Lesson Plan: Trauma Lecture 2

1. Present principles of suturing

   1.1 Converts open to closed wounds — Flip Chart

   1.2 Many wounds are better left open

   1.3 Schedule of suture removal

2. Trainer demonstrates suture technique using skills checklist. — Suture Kit, Rubber Board

3. Students practice in pairs checking each other and reviewed by trainer using checklist.

4. Present factors which favor wound infection:
   - 4.1 Dead tissue
   - 4.2 Blood clots
   - 4.3 Poor blood supply
   - 4.4 Foreign bodies in wound
   - 4.5 Swelling
   - 4.6 Delayed surgical care
   - 4.7 Inadequate debridement
   - 4.8 Wound packed too tight
   - 4.9 Wound sutured when dirty
   - 4.10 Poor wound care, relying on antibiotics.

5. Present characteristics of local vs. invasive wound infection.

6. Present treatment of wound infections
   - 6.1 Opening and cleaning
   - 6.2 Debridement
   - 6.3 Antibiotics

7. Present technique of incision and drainage — Skills list

8. Students practice on foam model checking each other, using skills checklist. — I&D Kit

Assigned Reading: FM Text Chapter 11.

Evaluation: Written Examination

FILENAME:TRAUMA2.LP

I. Unit 3: Burns and Bites

FIRST AID: BURNS

Learning Objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

   1.1 List 3 types of burns
   1.2 Describe 4 factors in classification of burns.
   1.3 Describe effects of burns on:
      a. skin
      b. whole body
   1.4 List and Explain 3 classifications of burns including signs and symptoms of 3 degrees of burns.
   1.5 Explain the Rule of Nines and its use
   1.6 List "critical" burns
   1.7 Describe treatment of degrees of burns including:
      a. ABCs
      b. cooling
      c. correct determination and provision of fluid needs
      d. use of catheters
      e. pain medication
      f. prevention of infection
      g. debridement
      h. positioning and bandaging
      i. escharotomy
      j. treatment of burns over broken bones
      k. nutrition

2. Skills

   2.1 Diagnose degree of burn if seen in clinic.

   2.2 Provide correct treatment for burns.

   2.3 Provide patient/family teaching re: continued home care for burns.

TRAUMA

I. Unit 3: Burns and Bites

FIRST AID: BITES

Learning Objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

1.1 Describe differentiation between poisonous and non-poisonous snakes.
1.2 List and describe effects of 2 types of snake venom.
1.3 Describe factors affecting chance of survival after bite.
1.4 Describe first aid in suspected poisonous snake bite.
-explain difference between constricting bandage and tourniquet.
1.5 Describe signs and symptoms of scorpion bite.
1.6 Describe treatment of scorpion bite.
1.7 Describe correct treatment of animal/human bite.
1.8 Explain why suturing is inappropriate.

2. Skills

2.1 Identify poisonous/non-poisonous snake on drawing and explain points examined.
2.2 Provide correct treatment for bites if seen in clinical setting.
2.3 Demonstrate and explain use of constricting bandage.

FILENAME:TRAUMA3B.OBJ

TRAUMA

I. Unit 3: Burns and Bites

Lesson Plan: Trauma Lecture 3

1. Present the three types of burns — Flip chart
   - 1.1 Thermal
   - 1.2 Chemical
   - 1.3 Electrical

2. Present the 4 factors in classification of burns:
   - 2.1 Depth
   - 2.2 Per Cent (Rule of Nines)
   - 2.3 Patients age
   - 2.4 Associated injuries

3. Present the three classes of burns.
   - 3.1 First degree
   - 3.2 Second degree
   - 3.3 Third degree

4. Present Rule of Nines and its use. — Diagrams of burn patients.

   Students will calculate % burn.

5. Present concept of "critical burns".
   - 5.1 Respiratory injury
   - 5.2 Other complicating trauma
   - 5.3 Greater than 30%
   - 5.4 Third degree burns over 10%
   - 5.5 Burns of hands, feet or genitalia
   - 5.6 Burns across joints
   - 5.7 Age greater than 70 years.

6. Present treatment of burns.
   - 6.1 Clean and cover
   - 6.2 Second and third degree
     - a. ABC's
     - b. cooling
     - c. fluid assessment/calculation
     - d. foley catheter
     - e. pain meds
     - f. prevention of infection/tetanus tox.
     - g. debridement/dressings
     - h. positioniong and bandaging
     - i. escharotomy
     - j. treatment of burns over fractures
     - k. nutrition

#4 Diagrams: Calculate fluid needs.

FILENAME:TRAUMA3.LP

7. Present differences between poisonous and non-poisonous snakes — Diagrams/photos
8. Types of snake venom: hemo- and nerotoxic
9. Factors influencing survival:
   - 9.1 age, size and health of victim
   - 9.2 depth, location and number of bites
   - 9.3 duration of bite
   - 9.4 amount of clothing between victim and snake
   - 9.5 kind, size and maturity of snake
10. Present treatment of snake bite
    - 10.1 Supportive care
    - 10.2 DO NOT INCISE AND SUCK
11. Present characteristices of scorpion bites:
    - 11.1 usually only local pain/swelling
    - 11.2 may seizure; use diazepam
    - 11.3 supportive care usually all required
12. Present treatment of animal and human bites:
    - 12.1 increased risk of infection
    - 12.2 tetanus toxoid important
    - 12.3 NEVER suture- extensive irrigation and debridement only.
    - 12.4 keep rabies in mind
    - 12.5 antibiotics-Penicillin 500 QID x 5 days

Assigned Reading: FM Text Chapter 11, parts 12 and 13.

Evaluation: Written Examination

FILENAME:TRAUMA3.LP

TRAUMA

I. Unit 4: Basic Trauma Care and CPR

FIRST AID: ABC'S/CPR

Learning Objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

   1.1 List and explain the ABC's of first aid.
   1.2 List steps of initial assessment of injured/wounded person including:
   a. pulse
   b. breathing
   c. bleeding
   d. shock
   e. burns
   f. fractures and head injuries

   1.3 Explain rationale for each step.
   1.4 State steps for CPR, including:
   a. method and rates for adults and children

2. Skills

   2.1 Demonstrate initial assessment on model or student.
   2.2 On model, demonstrate CPR technique.

FILENAME:TRAUMA4A.OBJ

I. Unit 4: Basic Trauma Care and CPR

FIRST AID: BLEEDING CONTROL

Learning Objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

1.1 Define hemorrhage
1.2 Identify sites where risk of hemorrhage due to injury is high.
1.3 List 3 methods of controlling bleeding.
1.4 List steps and important considerations for each.
1.5 Describe only rationale for using tourniquet.
1.6 Explain risk of using tourniquet
1.7 Identify appropriate pressure point for control of bleeding from:
  a. upper and lower arm
  b. hand
  c. scalp
  d. leg
1.8 Describe signs and symptoms of internal bleeding.
1.9 Describe symptomatic treatment of internal bleeding.

2. Skills

2.1 Demonstrate following methods of bleeding control:
  a. direct pressure
  b. elevation
  c. pressure points
2.2 Demonstrate preparation and use of tourniquet.

FILENAME:TRAUMA4B.OBJ

I. Unit 4: BASIC TRAUMA CARE/CPR/BLEEDING

Lesson Plan: Trauma Lecture 4

1. Introduce approach to injured patient a. initial assessment b. is he conscious? c. pulse d. breathing e. bleeding f. shock g. burns h. fractures or head injury	Board/marker
2. Lecture/demonstration: airway management a. head tilt, jaw thrust or chin lift b. look, listen and feel c. mouth to mouth technique	Mannikin Demo/ return demo
3. Circulation a. indication for chest compressions b. time limits for beginning/ending i. begin within 4 minutes ii. stop after 15 minutes if no response	Board/marker
4. Cardiopulmonary Resuscitation (CPR) a. establish pulselessness b. chest compression technique c. rates/methods for 1 and 2 man	Mannikin Demo/ return demo
5. Air way obstruction a. universal distress sign b. inability to speak, cough, breathe c. cyanosis d. signs of partial obstruction e. technique of back blows/abdominal thrusts	Mannikin Demo/ return demo
6. Review of bleeding control a. direct pressure b. elevation c. pressure points d. tourniquets	Diagram: pressure points Demo/ return demo
7. Review of signs/treatment internal bleeding.	Board/marker

Assigned Reading: FM Text Chapter 11, part 1, pages 1-11.
Handout: copy of Farsi text IMC Vol IIC Ch.14, p.39-53 (CPR)
Evaluation: Written Examination
FILENAME:TRAUMA4.LP

TRAUMA

I. Unit 5: Shock and Patient Survey

FIRST AID: SHOCK

Learning Objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

   1.1 Define 3 kinds of shock.
   1.2 Describe signs and symptoms of 3 types of shock including:
   a. hypovolemic
   b. septic
   c. anaphylactic
   1.3 Identify etiology of each.
   1.4 Explain treatment of a-c of Objective 1.2.
   1.5 Describe method of estimating blood loss in hypovolemic shock.
   1.6 State normal urine output per hour.

2. Skills

   2.1 Identify a-c if present in a clinical setting.
   2.2 Provide correct treatment for a-c if seen in clinical setting.
   2.3 Demonstrate ability to monitor urinary output with or without catheter.

FILENAME:TRAUMA5A.OBJ

TRAUMA

I. Unit 5: Shock and Patient Survey

FIRST AID: PATIENT SURVEY

Learning Objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

   1.1 Review points of primary survey from 1st Aid/ABCs
   1.2 Review treatment of life-threatening problems
   1.3 Describe steps of neurologic exam
   1.4 State frequency of vital signs for seriously injured/ill patient.
   1.5 Review signs of shock.
   1.6 Describe and explain steps of secondary survey.

2. Skills

   2.1 Demonstrate ability to provide secondary survey in 2 minutes.

FILENAME:TRAUMA5B.OBJ

I. **Unit 5: SHOCK/PATIENT SURVEY**

Lesson Plan: Trauma Lecture 5

1. Review of shock:definition/causes — Board/marker
2. Hypovolemic Shock
   - 2.1 Causes:
     - a. severe hemorrhage
     - b. burns or cruch injury
     - c. vomiting/diarrhea
   - 2.2 Signs
     - a. rapid pulse
     - b. low bp
     - c. decreased urine output
     - d. increased thirst
     - e. restlessness
     - f. cool, clammy skin
     - g. rapid shallow respirations
     - h. nausea, vomiting
   - 2.3 Treatment
     - a. ABC's
     - b. two large bore IV's with saline or Ringer's lactate.
     - c. elevate legs
     - d. insert foley catheter to monitor urine output
     - e. treat other injuries; splint fractures
     - f. keep warm
     - g. monitor vital signs every 5 minutes
3. Septic shock
   - 3.1 causes-bacteria in blood
   - 3.2 Signs
     - a. chills/fever
     - b. rapid pulse/low BP
     - c. skin may be warm at first
     - d. mental status and urine output may be normal at first.
   - 3.3 Treatment
     - a. ABC's
     - b. IV fluids as needed to maintain urine output/ BP
     - c. IV antibiotics
4. Anaphylactic Shock
   - 4.1 Causes-allergic reactions
   - 4.2 Signs
     - a. anxiety
     - b. hives/swelling
     - c. respiratory distress
     - d. cyanosis
     - e. rapid pulse, low BP
     - f. loss of consciousness
     - g. convulsions

4.3 Treatment
a. adreanlin 0.5 ml SUBCUTANEOUSLY; repeat in 5-10 minutes.
b. IV saline or ringers
c. promethazine 25-50 mg IM
d. supportive care

5. Patient Survey
5.1 Primary survey-ABC's
5.2 Rescuscitation phase-treat any life-threatening problems
a. airway obstruction
b. hemorrhage
c. shock
d. spinal injury
5.3 Neurologic examination — Demo/ return demo
a. level of consciousness
b. AVPU
c. grip strength/toe wiggle
5.4 Secondary survey
a. undress patient
b. vital signs
c. look, listen and feel head to toe
5.5 Head: skull, eyes, ears, nose, mouth
5.6 Neck: spine, trachea, carotids
5.7 Shoulders: clavicles
5.8 Chest: look, listen, and feel
5.9 Abdomen: 4 quadrants
5.10 Back: spine check, exit or other wounds
5.11 Pelvis: feel pelvic bones
5.12 Extremities (Legs and arms): color warmth, capillary refill, pulses, feel bones, muscle strength.

Assigned Reading: FM Text Chapter 11, parts 1 and 2.

Evaluation: Written Examination

FILENAME:TRAUMA5.LP

TRAUMA

I. Unit 6: Head and Spine Injuries

HEAD/SPINE INJURIES

Learning Objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

   1.1 Describe the basic anatomy and pathophysiology of the brain and skull when injured
   1.2 List the types of head injuries
   1.3 List the signs of head injuries
   1.4 Describe the basic anatomy of the spine
   1.5 List the types of spine injuries
   1.6 List the signs of spine injuries
   1.7 List the steps in physical assessment of head and spine injuries.
   1.8 Explain the rationale and treatment of head and spine injuries.

2. Skills

   2.1 Demonstrate the assessment and treatment of head and spine injuries.

FILENAME:TRAUMA6.OBJ

I. Unit 6: HEAD/SPINE INJURIES

Lesson Plan: Trauma Lecture 6

1. Review anatomy and pathophysiology of brain and skull when injured — Diagram/ skeleton Board/marker
   - 1.1 Skin, meninges, skull, brain
   - 1.2 CSF
   - 1.3 Concept of brain in "closed box of skull.
2. Types of head injuries
   - 2.1 Skull fractures-types
   - 2.2 Brain injuries
     - a. concussion
     - b. contusion
     - c. intracranial hemorrhage
     - d. impaled objects
3. Signs of head injury
   - 3.1 Pain/tenderness/swelling of scalp
   - 3.2 Skull deformity
   - 3.3 Sunken eye
   - 3.4 Unequal pupils
   - 3.5 Bruising under eyes or ears
   - 3.6 Cerebrospinal fluid from wounds, ears, nose or mouth
   - 3.7 Increased BP, pulse decreased
   - 3.8 Restlessness
   - 3.9 Projectile vomiting
   - 3.10 Convulsions
   - 3.11 Unconsciousness
   - 3.12 Incontinence of stool/urine
   - 3.13 Weakness of one side (arm/leg)
4. Review of spinal anatomy
   - 4.1 Cervical
   - 4.2 Thoracic
   - 4.3 Lumbar
   - 4.4 Sacro-coccygeal
5. Types of spinal injury
   - 5.1 Compression
   - 5.2 Flexion
   - 5.3 Hyperextension
   - 5.4 Flexion-rotation
6. Signs of spinal injury
   - 6.1 Pain/tenderness/wounds over head, neck or back
   - 6.2 Spinal deformity
   - 6.3 Paralysis
   - 6.4 Incontinence of stool/urine
   - 6.5 Impaired breathing
   - 6.6 Priapism
7. Physical assessment — Demo/return demo
   - 7.1 ABC's
   - 7.2 Immobilize head and neck

7.3 Level of consciousness
7.4 Vital signs
7.5 Examine head-explore any wounds with sterile gloves
7.6 Coordination tests-finger to nose and eyes follow fingers
7.7 If patient unconscious
a. scrape soles of feet
b. check breathing
c. check for priapism

8. Treatment of head injuries
8.1 Control bleeding
8.2 Loose filling bandages over open fractures
8.3 Antibiotics
8.4 Allow free drainage of CSF
8.5 Elevate head of bed if no neck injury
8.6 If in shock, look for other causes
8.7 Transfer if remains unconscious, otherwise observe in clinic until completely alert (may be 1-2 days)

9. Treatment of spine injuries
9.1 Immobilize neck
9.2 Log roll when moving
9.3 Transfer-must maintain neck immobilization

Evaluation: Written Examination

FILENAME:TRAUMA6.LP

TRAUMA

I. Unit 7: Chest Injuries

Learning objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

   1.1 Identify anatomy and physiology of the chest
   1.2 Explain causes of collapsed lung
   1.3 Define the following terms:
   a. rib fracture
   b. flail chest
   c. open pneumothorax
   d. closed pneumothorax
   e. tension pneumothorax
   f. hemothorax
   1.4 Describe the signs and symptoms for 1.3 a-f.
   1.5 Explain differential diagnoses between 1.3 a-f.
   1.6 Patient education for 1.3 a-f.

2. Skills
   2.1 Demonstrate a primary survey of the chest
   2.2 Demonstrate a complete history and physical exam of the chest.
   2.3 Demonstrate first aid treatment for:
   a. rib fracture
   b. flail chest
   c. open pneumothorax
   d. closed pneumothorax
   e. tension pneumothorax
   f. hemothorax
   2.4 Explain extended care for above conditions including:
   a. treatment of shock
   b. use of valsalva maneuver
   c. medications and IV's
   d. transportation of patient
   e. positioning of patient

5. Evaluation

FILENAME:TRAUMA7.OBJ

TRAUMA

I. Unit 7: Chest Injuries

Lesson plan

1. Knowlege

   1.1 Anatomy and physiology of the chest
   1.2 Causes of collapsed lung
   1.3 Anatomy, physiology, signs, symptoms, and treatment for:
   a. rib fracture
   b. flail chest
   c. open pneumothorax
   d. closed pneumothorax
   e. tension pneumothorax
   f. hemothorax
   1.4 Differential diagnoses for 1.3 a-f.
   1.5 Medications and IVs for 1.3 a-f.
   1.6 Side effects and complications for 1.3 a-f.

2. Learning Activities
   2.1 Demonstration of relevant history and physical exam for chest
   2.2 Demonstration of use of occlusive dressing
   2.3 Demonstrate positioning of patient
   2.4 Lecture

3. Materials
   3.1 Chalkboard
   3.2 Posters of Chest
   3.3 FM Text
   3.4 Occlusive dressing
   3.5 Stethoscope

4. Skills
   4.1 Relevant History and Physical exam
   4.2 Diagnosis, First Aid, Extended Care and Patient Education for:
   a. rib fracture
   b. flail chest
   c. open pneumothorax
   d. closed pneumothorax
   e. tension pneumothorax
   f. hemothorax

5. Evaluation
   5.1 Written Examination
   5.2 Continual evaluation in ER

FILENAME:TRAUMA7.LP

TRAUMA

I. Unit 8: ABDOMINAL/GENITAL INJURIES

Learning objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege
   - 1.1 Identify anatomy and physiology of abdomen.
   - 1.2 Identify the two types of abdominal organs.
   - 1.3 Explain the importance of NPO in early period after abdominal injury.
   - 1.4 Define and locate:
     - a. Peritoneum
     - b. Liver
     - c. Spleen
     - d. Kidney
     - e. Large intestine
     - f. Small intestine
     - g. Stomach
     - h. Appendix
   - 1.5 List signs and symptoms of injury to 1.4 a-h.
   - 1.6 List treatments and patient education for all injuries listed in 1.5.
   - 1.7 Identify anatomy and physiology of male and female genitalia.
   - 1.8 List possible types of genital injuries
   - 1.9 Explain testicular retration in trauma
   - 1.10 List indications for urinary catheterization
   - 1.11 Explain:
     - a. control of genital bleeding
     - b. cold compresses on genitals
     - c. cleaning of genitals

2. Skills
   - 2.1 Demonstrate history and physical examination for abdomen
   - 2.2 Locate major abdominal organs by palpation
   - 2.3 Know normal findings for auscultation, percussion, palpation of abdomen
   - 2.4 Demonstrate aseptic catheterization

3. Evaluation
   - 3.1 Written Examination
   - 3.2 Continual evaluation in ER

FILENAME:TRAUMA8.OBJ

TRAUMA

I. Unit 7: ABDOMINAL/GENITAL INJURIES

Lesson plan

1. Knowlege

   1.1 Anatomy and physiology of the abdomen
   1.2 Identify two types of abdominal organs (Hollow, solid)
   1.3 Define, locate, explain signs and symptoms of injury to:
   a. peritoneum
   b. liver
   c. spleen
   d. kidney
   e. large intestine
   f. small intestine
   g. stomach
   h. appendix
   1.4. Explain treatment and patient education for injuries to 1.3 a-h.
   1.5. Explain importance of NPO order in early period after abdominal trauma.
   1.6 Anatomy and physiology of male and female genitals.
   1.7 Explain possible types of genital injuries.
   1.8 Explain function of testicular retraction in trauma
   1.9 List indications for urinary catheterization
   1.10 Explain:
   a. control of genital bleeding
   b. cold compresses on genitals
   c. cleaning of genitals

2. Learning Activities
   2.1 Lecture
   2.2 Demonstration/return demonstration

3. Materials
   3.1 Chalkboard
   3.2 Posters abdomen/genitals
   3.3 FM Text
   3.4 History/physical exam checklists

4. Skills
   4.1 Relevant history and physical exam
   4.2 Patient education

5. Evaluation
   5.1 Written Examination
   5.2 Continual evaluation in ER

FILENAME:TRAUMA8.LP

I. Unit 9: EMERGENCY CARE/SPLINTING OF FRACTURES

Learning objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

   1.1 Identify skeletal anatomy
   1.2 Define open and closed fractures
   1.3 Describe signs and symptoms of fractures.
   1.4 Define and explain the "Five P's":
      a. Pain
      b. Pulse
      c. Parasthesia
      d. Paralysis
      e. Pallor
   1.5 List indications for splinting
   1.6 List correct types of splints for:
      a. clavicle
      b. shoulder dislocation
      c. humerus
      d. elbow
      e. wrist and hand
      f. finger
      g. hip and femur
      h. knee
      i. tibia and fibula
      j. ankle
      k. foot
      l. toe

2. Skills
   2.1 Demonstrate history and physical examination for suspected fractures
   2.2 Demonstrate correct use of splints for:
      a. clavicle
      b. shoulder dislocation
      c. humerus
      d. elbow
      e. wrist and hand
      f. finger
      g. hip and femur
      h. knee
      i. tibia and fibula
      j. ankle
      k. foot
      l. toe

3. Evaluation
   3.1 Written Examination
   3.2 Continual evaluation in ER

FILENAME:TRAUMA9.OBJ

I. Unit 9: EMERGENCY CARE/SPLINTING OF FRACTURES

Lesson plan

1. Knowlege
   - 1.1 Review skeletal anatomy
   - 1.2 Define open and closed fractures
   - 1.3 Describe signs and symptoms of fractures
   - 1.4 Define and explain the "Five P's"
     - a. pain
     - b. pulse
     - c. parasthesia
     - d. paralysis
     - e. pallor
   - 1.5 List indications for splinting
   - 1.6 Explain complete patient education for fractures

2. Learning Activities
   - 2.1 Lecture
   - 2.2 Demonstration and class practice of correct splints for:
     - a. clavicle
     - b. shoulder dislocation
     - c. humerus
     - d. elbow
     - e. wrist and hand
     - f. finger
     - g. hip and femur
     - h. knee
     - i. tibia and fibula
     - j. ankle
     - k. foot
     - l. toe
   - 2.3 Demonstration of history and physical exam for suspected fractures

3. Materials
   - 3.1 Chalkboard
   - 3.2 FM Tex
   - 3.3 Splint materials
   - 3.4 Skeleton

4. Skills
   - 4.1 Relevant history and physical exam
   - 4.2 Correct application of all types of splints
   - 4.3 Relevant patient education

5. Evaluation
   - 5.1 Written Examination
   - 5.2 Continual evaluation in clinic and ER
   - 5.3 Observation of class splinting practice

FILENAME:TRAUMA9.LP

I. Unit 10: HEAT AND COLD INJURIES/TRIAGE

Objectives: Upon completion of this unit, the student shall be able to:

1. Knowlege

   1.1 List and define three heat related injuries:
   - a. heat cramps
   - b. heat exhaustion
   - c. heat stroke

   1.2 Identify risk groups and cases of heat related injuries

   1.3 Describe signs, symptoms and treatment of heat related injuries

   1.4 Explain importance of and indications for:
   - a. oral rehydration
   - b. salt replacement (ORS)
   - c. IV rehydration
   - d. monitoring I&O

   1.5 List and define three cold related injuries:
   - a. hypothermia
   - b. frostnip
   - c. frostbite

   1.6 Explain factors contributing to cold injury.

   1.7 Describe treatment for cold injuries.

   1.8 Describe risks of thawing and refreezing

   1.9 Describe importance of prevention and patient teaching regarding cold injuries.

   1.10 Define and explain the purpose of triage

   1.11 Describe the categories and priorities in triage

   1.12 Describe the types of problems assigned to each triage category.

   1.13 List the steps in the triage process

2. Skills

   2.1 Demonstrate patient education for heat and cold injuries

   2.2 Demonstrate triage with mock victims or case study.

3. Evaluation

   3.1 Written examination

   3.2 Continual evaluation in clinic and ER

FILENAME:TRAUMA10.OBJ

I. Unit 10: HEAT AND COLD INJURIES/TRIAGE

Lesson plan

1. Knowledge

   1.1 List and define three heat related injuries:
   - a. heat cramps
   - b. heat exhaustion
   - c. heat stroke

   1.2 Identify risk groups and cases of heat related injuries

   1.3 Describe signs, symptoms and treatment of heat related injuries

   1.4 Discuss and explain indications for and use of:
   - a. oral rehydration
   - b. salt replacement (ORS)
   - c. IV regydration
   - d. monitoring I&O

   1.5 List and define three cold related injuries:
   - a. hypothermia
   - b. frostnip
   - c. frostbite

   1.6 Explain factors contributing to cold injury:
   - a. fatigue, illness, injury
   - b. inadequate or improper clothing
   - c. age or immobility
   - d. hunger or malnutrition
   - e. temperature
   - f. wind chill
   - g. precipitation
   - h. previous cold injury

   1.7 Describe signs, symptoms and treatment for cold injuries.

   1.8 Describe dangers of thawing and refreezing

   1.9 Describe importance of prevention and patient teaching regarding cold injuries.

   1.10 Define and explain the purpose of triage

   1.11 Describe the categories and priorities in triage

   1.12 List steps in the triage process

2. Learning Activities
   - 2.1 Lecture
   - 2.2 Role playing
   - 2.3 Case studies

3. Materials
   - 3.1 Chalkboard
   - 3.2 FM Tex

4. Skills
   4.1 Demonstrate patient education for heat and cold injuries
   4.2 Demonstrate triage with mock victims

5. Evaluation
   5.1 Writtenn Examination
   5.2 Continual evaluation in clinic and ER

FILENAME:TRAUMA10.LP

CARDIOVASCULAR

Learning Objectives - The student will be able to:

1. Knowledge
   - 1.1 Define terms concerning the cardiovascular system.
   - 1.2 Define the structure and function of the cardiovascular system.
   - 1.3 List the steps in history and physical examination of the cardiovascular system.
   - 1.4 Describe the clinical picture of edema, cyanosis, and dyspnea.
   - 1.5 Describe the clinical picture and treatment of congestive heart failure.
   - 1.6 Describe the clinical picture and treatment, with rest and analgesics, of angina pectoris and myocardial infarction.
   - 1.7 Identify the appropriate treatment for a patient with rheumatic fever.

2. Skills
   - 2.1 Correctly diagnose and refer patients with congesive heart failure, angina pectoris, myocardial infarction, and rheumatic fever.

FILENAME: CARDIO.OLP

CARDIOVASCULAR

. Lesson Plan:

1. Knowledge
   - 1.1 Terms concerning the cardiovascular system.
   - 1.2 Structure and function of the cardiovascular system.
   - 1.3 Steps in the history and physical exam for the cardiovascular system.
   - 1.4 Clinical picture of edema, cyanosis, and dyspnea.
   - 1.5 Clinical picture and treatment of:
     - congestive heart failure,
     - angina pectoris and myocardial infarction,
     - rheumatic fever.

2. Learning Activities:
   - 2.1 Lecture of knowledge component.
   - 2.2 Group discussion.
   - 2.3 Assignment - review with clinical instructor patients with:
     - congestive heart failure,
     - angina pectoris,
     - myocardial infarction,
     - acute rheumatic fever.

3. Materials:
   - 3.1 Whiteboard.
   - 3.2 FM textbook.
   - 3.3 CMC manual.
   - 3.4 Handouts.
   - 3.5 Chart.
   - 3.6 Stethoscope.

4. Skills:
   - 4.1 Demonstrate patient history and physical examination of the CV system.
   - 4.2 Diagnose and treat congestive heart failure.
   - 4.3 Diagnose and treat angina pectoris and myocardial infarction.
   - 4.4 Diagnose and treat acute rheumatic fever.

5. Evaluation:
   - 5.1 Written exam.
   - 5.2 Oral exam.
   - 5.3 Return demonstration.
   - 5.4 Clinical practice under supervision.

FILENAME: CARDIO.OLP

II. Vascular
Learning Objectives

1. Knowledge - The student will:
   1.1 Explain the structure and function of the vascular system.
   1.2 List the steps in the history and physical examination of the vascular disease patient.
   1.3 Describe the clinical picture and classification of hypertension.
   1.4 Describe the clinical picture of:
   - hypertension,
   - hypotension,
   - hemorrhoids,
   - varicose veins.
   1.5 Identify the appropriate treatment for a patient with:
   - hypertension,
   - hypotension,
   - hemorrhoids,
   - varicose veins,

2. Skills:
   2.1 Correctly diagnose and treat or refer patients with:
   - hypertension,
   - hypotension,
   - hemorrhoids,
   - varicose veins.

FILENAME: CARDIO2.OLP

II. Vascular
Lesson Plan

1. Knowledge:
   1.1 Structure and function of the vascular system.
   1.2 History and physical exam of the vascular system according to the cardiovascular examination checklist.
   1.3 Clinical picture and classification of hypertension.
   1.4 Clinical picture and appropriate treatment for:
   - hypertension,
   - hypotension,
   - hemorrhoids,
   - varicose veins.

2. Learning Activities:
   2.1 Lecture.
   2.2 Reveiw of clinical cases with the clinical instructor.

3. Materials:
   3.1 FM textbook.
   3.2 CMC manual.
   3.3 Whiteboard.
   3.4 Chart.

4. Skills:
   4.1 Diagnosis and treatment or referral of vascular patients.

5. Evaluation:
   5.1 Oral questions.
   5.2 Written exam.
   5.3 Clinical evaluation.

FILENAME: CARDIO2.OLP

GENITO-URINARY SYSTEM

Objectives: Upon completion of this unit, the student shall be able to:

1. Recognize normal anatomy and physiology of the GU system.

2. Demonstrate a history and physical exam for a GU complaint, meeting criteria in History and Physical Examination for Adult Skills Checklist; History and Physical Examination for Child Skills Checklist; Physical Examination Skills Checklist.

3. Recognize, prevent and treat urinary tract infection including cystitis, pyelonephritis, epididymitis, prostatitis.

4. Recognize and treat kidney/bladder stones, including renal colic.

5. Recognize and treat urinary retention.

6. Recognize and treat/refer testicular torsion, masses, hydrocoele, epididymitis, orchitis and undescended testes.

7. Recognize genital lesions, discharges and sexually transmitted diseases.

8. Recognize and treat/refer impotence or infertility.

9. Discuss indications for or contraindications against the use of a foley catheter.

10. Demonstrate insertion, management and discontinuance of a foley catheter, meeting the criteria in Bladder Catheterization Checklist.

FILENAME:GEN-URIN.OBJ

GENITO-URINARY SYSTEM: TEACHING PLAN 5 hrs.

1. Review normal anatomy and physiology of the GU system.
   Lecture by professor.
   (model human body, FM Manual Ch.1g)

2. Review history and physical exam for a GU complaint.
   Demonstration by instructor. Practice by student.
   Final demonstration by student shall meet criteria in History and Physical Examination for Adult Skills Checklist; History and Physical Examination for Child Skills Checklist; Physical Examination Skills Checklist.
   (FM Manual Ch.1g p.4 and Ch.7 p.1-8)

3. Review recognition, prevention and treatment of urinary tract infection including cystitis, pyelonephritis, epididymitis, prostatitis.
   Lecture by instructor.
   (FM Manual Ch.1g p.5-6 and CMC Manual p.60, 62, 63, 69)

4. Review Recognition and treatment of kidney/bladder stones, including renal colic.
   Lecture by instructor.
   (F.M. Manual Ch.1g p.6 and CMC Manual P. 64)

5. Review recognition and treatment of urinary retention.
   Lecture by instructor.
   (CMC Manual p. 65)

6. Review recognition and treatment/referral of testicular torsion, masses, hydrocoele, epididymitis, orchitis and undescended testes.
   Lecture by instructor.
   (FM Manual Ch.1g p.9 and CMC Manual p.66)

7. Review recognition and treatment of genital lesions, discharges and sexually transmitted diseases.
   Lecture by instructor.
   (FM Manual Ch.1g p. 6-8,10-11 and CMC Manual p. 61)

8. Review recognition and treatment/referral of impotence or infertility.
   Lecture by instructor.
   (CMC Manual p. 67-68)

9. Review indications for or contraindications against the use of a foley catheter. Review the insertion, management and discontinuance of a foley catheter.
   Lecture/demonstration by instructor. Practice by student. Final demonstration by student will meet criteria in Bladder Catheterization Checklist.
   (FM Manual Ch.10 p.3)

FILENAME:GEN-URIN.LP

MUSCULOSKELETAL

Learning Objectives

1. Knowledge - The student will:
   - 1.1 Explain the function of bones and muscles.
   - 1.2 Describe the components and make-up of bones including:
     - living cells,
     - calcium,
     - blood vessels,
     - nerves,
     - marrow (blood component producing cells).
   - 1.3 Identify the major bones on a diagram of a skeleton.
   - 1.4 Identify the major muscles on a diagram of the body.
   - 1.5 Explain how muscles control movement.
   - 1.6 Explain why the sutures in an infant's skull are not closed.
   - 1.7 Explain parts and function of the thorax including:
     - protection of lungs,
     - breathing.
   - 1.8 Describe normal findings of an examination of the musculoskeletal system including:
     - alignment,
     - posture,
     - movement,
     - symmetry,
     - range of motion.
   - 1.9 Describe signs and symptoms indicating problems of the musculoskeletal system including:
     - pain and tenderness,
     - difficulty in movement,
     - swelling,
     - redness,
     - heat,
     - asymmetry,
     - changes in range of motion,
     - crepitation.
   - 1.10 Describe general signs, symptoms, and treatment of:
     - common sprains,
     - strains, including acute and chronic back pain.
   - 1.11 Explain treatment of 'total body pain.'
   - 1.12 Describe the difference between arthritis and arthralga.
   - 1.13 Describe the signs, symptoms, and treatment of:
     - septic arthritis,
     - rheumatoid arthritis,
     - osteoarthritis or degenerative joint disease.
   - 1.14 Describe the signs, symptoms, treatment, and prevention of:
     - acute osteomyelitis,
     - chronic osteomyelitis.

FILENAME:MUSCSK.OLP

1.16 Explain the risks involved in improper manipulation of fractures including:
- nerve damage,
- tissue damage,
- turning a closed fracture into an open fracture,
- pain.

1.15 Describe the signs, symptoms and treatment (including reduction and splinting) of the following fractures and dislocations:
- clavicle,
- humerus,
- elbow,
- wrist,
- finger, hand,
- femur,
- tibia/fibula,
- ankle,
- foot, toe.

1.17 Explain the importance of knowing the main referral resources in his clinic area for physio-therapy.

1.18 Explain the importance of referring disabled patients for physio-therapy.

1.19 Explain the results of immobilization on joints and muscles including:
- stiffness,
- atrophy,
- disability.

1.20 Explain patient teaching relating to:
- management of pain,
- elevation, support, and immobilization of injuries,
- signs of casting problems: circulatory, neurologic.
- exercises for rehabilitation of muscles and joints,
- expected length of time for healing,
- signs of infection in open fractures.

2. Skills - The student will:

2.1 Demonstrate physical examination to evaluate complaints relating to musculo-skeletal system according to appropriate checklist.

2.2 Demonstrate reduction and splinting of musculo-skeletal injuries.

2.3 Demonstrate physio-therapy for post-injury and polio patients.

FILENAME:MUSCSK.OLP

MUSCULOSKELETAL

Lesson Plan - Part 1

1. Knowledge:
   - 1.1 Anatomy and function of:
     - skeletal system,
     - muscular system.
   - 1.2 Components and makeup of bones including:
     - living cells,
     - calcium,
     - blood vessels,
     - nerves,
     - marrow (blood component producing cells).
   - 1.3 Reason why sutures in an infant's skull are not closed.
   - 1.4 Parts and function of the thorax including:
     - protection of lungs,
     - breathing.
   - 1.5 Examination of the musculo-skeletal system including:
     - alignment,
     - posture,
     - movement,
     - symmetry,
     - range of motion.
   - 1.6 Signs and symptoms indicating problems of the musculo-skeletal system, including:
     - pain, tenderness,
     - difficulty in movement,
     - swelling,
     - redness,
     - heat,
     - asymmetry,
     - changes in range of motion,
     - crepitation.

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Demonstration/return demonstration of musculoskeletal exam.

3. Materials:
   - 3.1 FM textbook.
   - 3.2 CMC manual.
   - 3.3 Checklist of musculoskeletal exam.

4. Skills:
   - 4.1 Physical examination of musculoskeletal system according to checklist.

5. Evaluation:
   - 5.1 Written exam.
   - 5.2 Practical skills exam based on musculo-skeletal exam checklist.

FILENAME:MUSCSK.OLP

MUSCULOSKELETAL

Lesson Plan - Part 2

1. Knowledge:
   - 1.1 Signs, symptoms, and treatment of common sprains.
   - 1.2 Signs, symptoms, and treatment of muscle strains including acute and chronic back pain.
   - 1.3 Treatment of 'total body pain.'
   - 1.4 Difference between arthritis and arthralga.
   - 1.5 Signs, symptoms, treatment, and prevention of:
     - septic arthritis,
     - rheumatoid arthritis,
     - osteoarthritis or degenerative joint disease,
     - rheumatic arthritis,
     - acute osteomyelitis,
     - chronic osteomyelitis.
   - 1.6 Risks involved in improper manipulation of fractures including:
     - nerve damage,
     - tissue damage,
     - turning a closed fracture into an open fracture,
     - pain.
   - 1.7 Signs, symptoms, and treatment of the following:
     - clavicle,
     - humerus,
     - elbow,
     - wrist,
     - finger/hand,
     - femur,
     - tibia/fibula,
     - ankle,
     - foot/toe.
   - 1.8 Importance of knowing where and why patients should be referred for physio-therapy.
   - 1.9 Results of immobilization on joints and muscles.
   - 1.10 Reasons to apply physiotherapy in post-injury and polio cases.
   - 1.11 Patient teaching related to:
     - management of pain,
     - elevation, support, and immobilization of injuries,
     - signs of casting problems: circulatory and neurologic.
     - exercises for rehabilitation of muscles and joints,
     - expected length of time for healing.
     - signs of infection in open fractures.

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Splinting.
   - 2.3 Physio-therapy exercises.

FILENAME:MUSCSK.OLP

3. Materials:
    3.1 FM textbook.
    3.2 CMC manual.
    3.3 Musculoskeletal exam checklist.
    3.4 Physio-therapy exercises handout.
    3.5 Whiteboard.
    3.6 Splinting materials.

4. Skills:
    4.1 Physical examination of musculoskeletal system.
    4.2 Demonstration of physio-therapy exercises for post-injury and polio patients.

5. Evaluation:
    5.1 Written exam.
    5.2 Practical skills exam based on musculoskeletal exam checklist.
    5.3 Practical skills exam of physio-therapy exercises based on handout.

FILENAME:MUSCSK.OLP

THE_EYE

Objectives: Upon completion of this unit the student shall be able to:

1. Recognize normal anatomy and physiology of the eye.

2. Perform a history and physical relating to an eye problem, meeting criteria in History and Physical Examination for Adult Skill Checklist; History and Physical Examination for Child Skill Checklist, and Physical Examination Skill Checklist.

3. Recognize, prevent and treat conjunctivitis: viral, bacterial, allergic, trachoma.

4. Recognize, prevent and treat eyelid infection: stye, blepharitis, dacrocystitis.

5. Recognize and treat eye trauma including foreign body removal, corneal ulcer, hyphema and penetrating trauma.

6. Recognize and treat pterygium.

7. Recognize and treat xerophthalmia.

8. Recognize and refer cataracts, iritis, glaucoma and sudden eye pain with visual loss.

FILENAME:EYE.OBJ

THE EYE: TEACHING PLAN 2.5 hours

1. Review normal anatomy and physiology of the eye.
   Lecture by instructor.
   (model:eye, FM Manual Ch.1f p. 1-2 and CMC Manual p.5)

2. Review history and physical relating to an eye problem.

   Demonstration by instructor. Practice by student. Final demonstration by student shall meet criteria in History and Physical Examination for Adult Skill Checklist; History and Physical Examination for Child Skill Checklist, and Physical Examination Skill Checklist.
   (FM manual Ch.1f p.2,3 and CMC Manual p.4)

3. Review recognition, prevention and treatment of conjunctivitis: viral, bacterial, allergic, trachoma.
   Lecture/demonstration by instructor. Practice application of eye ointment and eye irrigation by student. Final demonstration by student shall meet objectives in Application of Ophthalmic Medication and Eye Irrigation Checklist.
   (FM Manual Ch. 1f p. 5,7 and CMC Manual p.6,8)

4. Review recognition, prevention and treatment of eyelid infection: stye, blepharitis, dacrocystitis.
   Lecture by instructor.
   (FM Manual Ch.1f p.4)

5. Review recognition and treatment of eye trauma including foreign body removal, corneal ulcer, hyphema and penetrating trauma.
   Lecture/demonstration by instructor.
   (FM Manual Ch.1f p.3,8,9,11 and CMC Manual p.7,15)

6. Review the recognition of pterygium.
   Lecture by instructor.
   (FM Manual Ch.1f p.7 and CMC Manual p.12)

7. Review the recognition and treatment for xerophthalmia.
   Lecture by instructor.
   (FM Manual Ch.1f p.9-10and CMC Manual p.10)

8. Review recognition (and referral) for cataracts, iritis, glaucoma and sudden eye pain with visual loss.
   Lecture by instructor.
   (FM Manual Ch.1f p.6)

FILENAME:EYE.LP

EAR, NOSE AND THROAT

Objectives: Upon completion of this unit, the student shall be able to:

1. Recognize normal anatomy and physiology of the ear, nose and throat.

2. Perform a history and physical examination for an ear, nose or throat problem, meeting criteria in the History and Physical Examination for Adult Skills Checklist; History and Physical Examination for Child Skills Checklist; Physical Examination Skills Checklist.

3. Perform ear irrigation and application of ear medication, meeting criteria in Irrigation of Ear and Application of Ear Medication Checklist.

4. Recognize, prevent and treat the following:
   a. Common cold
   b. ear infection (otitis media) acute and chronic
   c. infection, outer ear (otitis externa)
   d. wax inpaction in ear (cerumen impaction)
   e. perforated eardrum (tympanic membrane) acute and chronic
   f. infection of the mastoid bone (mastoiditis)
   g. sinus infection (sinusitis) acute and chronic
   h. nose bleed with anterior packing
   i. runny nose due to allergies (allergic rhinitis)
   j. throat infection (pharyngitis) bacterial and viral
   k. infection of the tonsils (tonsillitis) including streptococcal
   l. diptheria
   m. croup/epiglottitis
   n. thrush
   o. canker sore (apthous ulcer)

5. Recognize and refer hearing loss.

FILENAME:ENT.OBJ

EAR, NOSE AND THROAT: TEACHING PLAN 2.5 hours

1. Review normal anatomy and physiology of the ear, nose and throat.
   Lecture by instructor
   (model: ear, nose, throat; FM Manual Ch.1E p.1-2)

2. Review history and physical examination relating to an ear, nose or throat problem.
   Demonstration by instructor. Practice by student. Final demonstration by student shall meet criteria in the History and Physical Examination for Adult Skills Checklist; History and Physical Examination for Child Skills Checklist; Physical Examination Skills Checklist.
   (FM Manual Ch.1E p.3 and CMC Manual p.16)

3. Review ear irrigation and application of ear medication.
   Demonstration by instructor. Practice by student. Final demonstration by student shall meet criteria in Irrigation of Ear and Application of Ear Medication Checklist.
   (FM Manual Ch.1E p.3 and CMC Manual p. 17)

4. Review recognition, prevention and treatment of the following:
   (Lecture by instructor)
   a. Common cold (FM Manual Ch.1E p. 6 and CMC Manual p. 24)

   b. ear infection (otitis media) acute and chronic (FM Manual Ch.1E p.4,10 and CMC Manual p.18-19)

   c. infection, outer ear (otitis externa) (FM Manual Ch.1E p.4 and CMC Manual p. 18,20)

   d. wax inpaction in ear (cerumen impaction)(CMC Manual p.17)

   e. perforated eardrum (tympanic membrane) acute and chronic (CMC Manual p.21)

   f. infection of the mastoid bone (mastoiditis)

   g. sinus infection (sinusitis) acute and chronic (FM Manual Ch.1E p.6 and CMC Manual p.24)

FILENAME:ENT.LP

h. nose bleed with anterior packing (FM Manual Ch.1E p. 5 and CMC Manual p. 26)

i. runny nose due to allergies (allergic rhinitis) (FM Manual Ch.1E p.6,10)

j. throat infection (pharyngitis/ laryngitis) bacterial and viral (FM Manual Ch.1E p. 7,9,10 and CMC Manual p. 23)

k. infection of the tonsils (tonsillitis) including streptococcal (FM Manual Ch.1E p. 7 and CMC Manual p. 23)

l. diptheria (FM Manual Ch.1E p.8)

m. croup/epiglottitis (FM Manual Ch.1E p.8)

n. thrush (FM Manual Ch.1E p.7)

o. canker sore (apthous ulcer) (FM Manual Ch.1E p. 7)

5. Review recognition and referral of hearing loss. Lecture by instructor. (CMC Manual p.21-22)

FILENAME:ENT.TP

INFECTIOUS DISEASES

Learning Objectives

1. Knowledge - The student will:
   1.1 Define the following terms:
   - Virus,
   - Bacteria,
   - Parasite,
   - Fungus,
   - Infection,
   - Contamination.

   1.2 List ways diseases are transmitted:
   - fecal/oral (contaminated hands, water, food),
   - by droplet (coughing, sneezing, spitting),
   - dirt (in wounds, on clothes, etc.),
   - by vectors (mosquitos, dogs, cats, rodents, flies, fleas,etc.),
   - by instruments (wound by knife, bullet, shrapnel, tools, contaminated needles, etc.).

   1.3 Demonstrate knowledge of prevention, diagnosis, treatment, and patient education for:
   - malaria,
   - anthrax,
   - brucellosis,
   - tetanus,
   - rabies,
   - meningitis,
   - sepsis.

FILENAME:INFECT.OLP

INFECTIOUS DISEASES

Lesson Plan

1. Knowledge:
   - 1.1 Mode of transmission and prevention methods for **malaria**:
     - a. -mosquito,
     - b. -control of vectors and breeding sites.
   - 1.2 Mode of transmission and prevention methods for **anthrax**:
     - a. -contaminated wounds,
       -airborne;
     - b. -caution in butchering,
       -boiling clothes, bedding of infected individuals.
   - 1.3 Mode of transmission and prevention methods for **brucellosis**:
     - a. -milk, uncooked meat,
       -open wounds;
     - b. -destruction of infected livestock.
   - 1.4 Mode of transmission and prevention methods for **tetanus**:
     - a. -contaminated wounds,
       -non-sterile cutting of umbilical cord;
     - b -clean all wounds well,
       -tetanus immunization.
       -use sterile blade for cutting umbilicus,
       -disinfect umbilicus bid,
   - 1.5 Mode of transmission and prevention methods for **rabies**:
     - a. -animal bites;
     - b. -destruction of strange dogs and any animal acting in an unusual manner.
   - 1.6 Mode of transmission and prevention methods for **meningitis**:
     - a. -airborne,
       -contaminated head wound;
     - b. -cover mouth when coughing,
       -clean wounds well.
   - 1.7 Mode of transmission and prevention methods for **sepsis**:
     - a. -contaminated wounds;
     - b. -clean wounds with antisptics.
   - 1.8 Diagnosis and treatment of:
     - malaria,
     - anthrax,
     - brucellosis,
     - tetanus,
     - rabies,
     - meningitis,
     - sepsis.

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Case studies.

FILENAME: INFECT.OLP

3. Materials:
    3.1 FM textbook.
    3.2 CMC manual.
    3.3 Whiteboard
    3.4 Skills checklist.

4. Skills:
    4.1 Demonstration of complete history and physical exam and vital signs skills.
    4.2 Demonstration of medication administration by all routes.
    4.3 Demonstration of ability to use CMC manual and formulary correctly.
    4.4 Demonstration of accurate and simple patient education.
    4.5 Demonstration of public health concepts.

5. Evaluation:
    5.1 Written exam.
    5.2 Ongoing clinical evaluation by skills checklists.

FILENAME:INFECT.OLP

PEDIATRICS

Objectives: Upon completion of this unit the student shall be able to:

1. Perform a history and physical examination for a child, meeting criteria in the History and Physical Examination for Child Skills Checklist.

2. Recognize and treat the following illnesses:

   a. measles (rubella)

   b. chickenpox

   c. pertussis

   d. tetanus

   e. meningtitis

   f. scarlet fever

   g. rubeola

   h. convulsions-febrile/other

   i. polio

   j. mumps

   k. tuberculosis

   l. diptheria

3. Recognize complications of EPI diseases, with referral as needed.

4. Recognize and refer congenital anomalies.

5. Recognize and treat diarrhea/ dehydration, including use of MUAC band, rehydration with commercial or homemade ORS, IV or medical therapy.

6. Monitor growth and development by observing height, weight and developmental milestones.

FILENAME:PEDS.OBJ

PEDIATRICS: TEACHING PLAN 10 HOURS

1. Review the history and physical examination for a child.
   Lecture/demonstration by instructor. Practice by student. Final demonstration by student shall meet criteria in the History and Physical Examination for Child Skills Checklist.
   (FM Manual Ch.3 p.3-9 and CMC Manual p.1-3)

2. Review the symptoms and treatment for the following illnesses:
   (please include family and community teaching)
   Lecture by instructor. Practice by case study method.

   a. measles (rubella) (FM Manual Ch.3 p.19 and CMC Manual p.114)

   b. chickenpox (FM Manual Ch.3 p.12-13 and CMC Manual p.115)

   c. pertussis (whooping cough) (FM Manual Ch.3 p.16 and CMC Manual p.40)

   d. tetanus (FM Manual Ch.1L p.5-6)

   e. meningtitis (FM Manual Ch.3 p.16 and CMC Manual p.93)

   f. scarlet fever (FM Manual Ch.3 p.19)

   g. rubeola (FM Manual Ch.3 p.15)

   h. convulsions-febrile/other (FM Manual Ch.1L p.3-4, Ch.3 p.14 and CMC Manual p.85)

   i. polio (FM Manual Ch.3 p.17)

   j. mumps (FM Manual Ch.3 p.15)

   k. tuberculosis (FM Manual Ch.1B p.14-15 and CMC Manual p.41)

   l. diptheria (FM Manual Ch.3 p.14)

3. Review the complications of EPI diseases. Encourage referral as needed.
   Lecture by instructor.

4. Review symptoms and encourage referral of congenital anomalies.
   Lecture by instructor.

FILENAME:PEDS.LP

5. Review causation and symptoms of diarrhea and dehydration, pertinent medical history, cultural beliefs affecting treatment, and dangers of dehydration, MUAC.
   Lecture by instructor.
   (FM Manual Ch.1D p.3-4,Ch.3 p.10-12, Ch.5 p.8-11 and CMC Manual p.48-49)

6. Review rehydration therapy: ORS oral (commercial and homemade) and NG Tube; IV therapy including calculation of fluid deficits by degree of dehydration and body weight; medical therapy in dehydration.
   Lecture/demonstration by instructor. Practice by student.
   (FM Manual Ch.1D p. 3-12, Ch.5 p.8-11 and CMC Manual p.50-51; Rice Oral Rehydration Therapy handout; Scalpvein Intravenous Rehydration handout.)
   (For basic procedures on IV and NG see Inpatient Management)

7. Review methods of monitoring growth and development: observing height, weight and developmental milestones.
   Lecture by instructor.
   (FM Manual Ch.3 p.1-2)

FILENAME:PEDS.LP

MATERNAL/CHILD HEALTH

I. Pregnancy/Prenatal Care
Learning Objectives

1. Knowledge - The student will:
   1.1 Define the anatomy and physiology of the female reproductive cycle (including the breast).
   1.2 Define pregnancy.
   1.3 Define the age of viability.
   1.4 Explain when pregnancy is most likely to occur during the menstrual cycle.
   1.5 Define the length of pregnancy.
   1.6 Define the changes in the body of a pregnant woman.
   1.7 Explain the danger of prescribing medication during pregnancy.
   1.8 List two antibiotics which are specifically contraindicated in pregnancy.
   1.9 List two medications which should be prescribed all through pregnancy and for three months after delivery.
   1.10 Describe the anatomy and physiology of fetal development.
   1.11 Describe the anatomy and physiology of the placenta and cord.
   1.12 State the minimum number of times a pregnant woman should be seen. Explain when and why.
   1.13 List and describe pregnancy risk factors you may find on a physical examination that require referral to a doctor.
   1.14 Describe the importance of good nutrition during pregnancy (and breastfeeding).
   1.15 Explain the importance of immunizations and which kind.
   1.16 List and explain how to treat the minor prenatal problems:
      - morning sickness,
      - heartburn,
      - constipation.
   1.17 List and explain how to treat the major prenatal problems:
      - anemia,
      - diabetes,
      - heart disease,
      - ectopic pregnancy,
      - toxemia,
      - fetal death,
      - bleeding,
      - malaria,
      - goiter,
      - urinary tract infection.
   1.18 Explain how paramedics can work in cooperation with traditional birth attendants.

2. Skills - The student will:
   2.1 Explain where on the pregnant abdomen the uterine fundus should be felt at each month.
   2.2 Demonstrate a history.
   2.3 Perform, as allowable, a physical exam and explain the purpose of the prenatal exam.

FILENAME:PRENATAL.OLP

MATERNAL/CHILD HEALTH

I. Pregnancy/Prenatal Care
Lesson Plan

1. Knowledge:

1.1 Anatomy and physiology of the female reproductive cycle.

1.2 Definitions of:
- pregnancy,
- abortion,
- miscarriage,
- age of viability,
- premature,
- prenatal care.

1.3 When pregnancy is most likely to occur during the menstual cycle and where it takes place.

1.4 How long a normal pregnancy lasts as determined by :
- last menstrual period (LMP),
- fundal height (landmarks, finger breadths).

1.5 List all the major fetal organs formed during the first two months of pregnancy.

1.6 Explain fetal organ growth and development during the last 7 months of pregnancy.

1.7 Explain brain growth and development during pregnancy and the first two years of life.

1.8 Danger of medications during the first 2-3 months of pregnancy with focus on:
- tetracycline/streptomycin,
- ampicillin,
- sulphanomides/bactrim,
- aspirin/paracetamol,
- chloroquine,
- flagyl.

1.9 Anatomy of the placenta, cord, water, and waterbag.

1.10 Five main functions of the placenta (respiratory, nutritive, excretory, protective, endocrine).

1.11 Main functions of the water and waterbag (movement of the baby, hydration, protection against injuries, temperature regulation).

1.12 Changes which take place in a woman's body during pregnancy and why it is important to know them.

1.13 The three major causes of maternal mortality in Afghanistan:
- hemorrhage,
- infection,
- eclampsia.

1.14 Statistics for:
- maternal mortality rate (MMR),
- infant mortality rate (IMR),
- under five mortality rate (U5MR).

1.15 Major causes of infant mortality:
- tetanus,
- too small,
- birth injury.

FILENAME:PRENATAL.OLP

1.16 Purpose of prenatal care:
- safe pregnancy,
- healthy baby.

1.17 MINIMUM number of times a pregnant woman should be seen in the clinic, when, and why:
- iron/vitamins,
- tetanus vaccine,
- problems.

1.18 Purpose of a history and physical of a pregnant woman.

1.19 Five components of a prenatal medical history:
- patient identification,
- history of present pregnancy,
- history of past pregnancies,
- past medical history,
- family medical history.

1.20 Three things which can be learned from a physical exam:
- diagnosis of pregnancy,
- length of pregnancy,
- complications.

1.21 Components of a physical exam:
- calculate expected date of delivery (EDD),
- vital signs,
- urine,
- general appearance,
- EENT/neck,
- respiratory and cardiac system,
- abdomen,
- pelvis (as allowable),
- extremities/musculoskeletal system.

1.22 High risk factors:
- how to find high risk factors (history and physical),
- problems which might complicate a pregnancy,
- problems which might cause problems with delivery.
- high risk factors which should be referred,
- what to do if no referral is available.

1.23 Recording a prenatal visit:
- why (to find high risk problems),
- what to do with the record (follow problems).

1.24 What to record about a prenatal visit:
- identification of the woman,
- estimated date of delivery or weeks pregnant,
- summary of past pregnancies,
- past medical history and past family medical history,
- tetanus immunization status,
- high risk factors,
- medications ordered.

1.25 Five steps in a prenatal re-visit:
- review of prenatal clinic visit record:
- interim pregnancy history (meds/diet/problems/iron/vits),
- physical exam (vital signs/urine/edema/abdominal exam/ fetal heart sounds/anemia)
- record findings,
- referral of high risk pregnancies.

FILENAME:PRENATAL.OLP

1.26 Three types of prenatal care:
- supportive,
- preventive,
- patient.

1.27 Nutritional teaching as the most important supportive and preventive care paramedics can give.

1.28 Foods high in iron.

1.29 Definition of maternal depletion syndrome.

1.30 Traditional customs regarding prenatal and nutritional care.

1.31 Common problems of pregnancy.

2. Learning Activities:
   2.1 Lecture.
   2.2 Discussion.

3. Materials:
   3.1 FM textbook.
   3.2 CMC manual.
   3.3 Diagrams.
   3.4 Handouts.
   3.5 Doll/cord/placenta,
   3.6 Whiteboard.

4. Skills:
   4.1 History of a pregnant woman.
   4.2 Physical exam of a pregnant woman.
   4.3 Estimation of date of delivery.

5. Evaluation:
   5.1 Written exam.
   5.2 Ongoing clinical evaluation.

FILENAME:PRENATAL.OLP

II. Labor and Delivery
Learning Objectives

1. Knowledge - The student will:
   - 1.1 List the signs that tell when the woman is going to deliver soon.
   - 1.2 List the history taking of a woman in labor.
   - 1.3 List and explain the different stages of labor.
   - 1.4 Define and explain how to treat the following abnormal conditions:
     - retained placenta,
     - incomplete placenta,
     - postpartum hemorrhage,
     - preterm labor,
     - early rupture of the bag of water,
     - prolonged rupture of the bag of water,
     - prolonged labor.
   - 1.5 Describe the position and state of the uterus in immediate post-partum.
   - 1.6 Define the vaginal bleeding in immediate post-partum.
   - 1.7 Describe cord care and how to cut the cord with sterile technique.
   - 1.8 List the steps for immediate care of the newborn including:
     - establishing breathing,
     - maintenance of body temperature,
     - cleaning.
   - 1.9 Describe interventions to encourage breathing in the newborn including:
     - suctioning,
     - physical stimulation,
     - mouth to mouth resuscitation.
   - 1.10 Describe local beliefs which apply to care and feeding of newborn infants.
   - 1.11 Explain the importance of keeping the umbilical stump clean and dry.
   - 1.12 Explain why the mother should be encouraged to breast feed immediately after birth including:
     - promotion of uterine contraction,
     - antibodies contained in colostrum,
     - stimulation of lactation.
   - 1.13 Explain how a woman can stimulate breastfeeding.

2 Skills - The student will:
   - 2.1 Demonstrate how to check a uterus after delivery.
   - 2.2 Demonstrate cord care after delivery.
   - 2.3 Demonstrate the measures to stimulate breathing in the newborn.
   - 2.4 Demonstrate how to wash a baby.

FILENAME:LBR-DLVY.OLP

II. Labor and Delivery
Lesson Plan

1. Knowledge:
   1.1 Medical history of a woman in labor.
   1.2 Signs of labor:
       - regular contraction,
       - contraction and effect.
   1.3 Definition of time of labor:
       - premature,
       - term,
       - post-term.
   1.4 Difference in amount of time necessary for delivery for:
       - primipare,
       - multipare.
   1.5 Three stages of labor.
   1.6 Signs, symptoms, care, and treatment of a woman for each stage of labor.
   1.7 Materials needed for the birth.
   1.8 Cord care.
   1.9 Immediate care of the newborn.
   1.10 Advantages of breastfeeding.
   1.11 When and how to breastfeed.
   1.12 Traditional customs associated with breastfeeding.
   1.13 Position and state of the uterus in postpartum.
   1.14 Vaginal discharge in post-partum:
       - quality,
       - length,
       - color.
   1.15 Signs of a detatched placenta, how to remove it, control of the placenta.
   1.16 Definitions:
       - retained placenta,
       - incomplete placenta,
       - postpartum hemorrhage,
       - preterm labor,
       - early rupture of the bag of water,
       - prolonged rupture of the bag of water,
       - prolonged labor.

2. Learning Activities:
   2.1 Lecture.
   2.2 Discussion.
   2.3 Demonstration/return demonstration of newborn care.

FILENAME:LBR-DLVY.CLP

3. Materials:
    3.1 FM textbook.
    3.2 CMC manual.
    3.3 Diagram of woman's anatomy.
    3.4 Doll.
    3.5 Thread.
    3.6 Betadine.
    3.7 Gauze.
    3.8 Bucket of warm water.
    3.9 Soap.
    3.10 Baby clothes.
    3.11 Clean cloth.

4. Skills:
    4.1 Demonstrate how to check a uterus after delivery.
    4.2 Demonstrate cord care after delivery.
    4.3 Demonstrate the measures to stimulate breathing in the newborn.
    4.4 Demonstrate how to wash a baby.

5. Evaluation:
    5.1 Written exam.
    5.2 Oral exam.

FILENAME:LBR-DLVY.OLP

III. Postpartum/Newborn Care
Learning Objectives

1. Knowledge - The student will:
   1.1 Describe the anatomy and physiology of a woman in postpartum.
   1.2 Define the postpartum.
   1.3 Describe the history and physical exam.
   1.4 Describe the signs, symptoms, and usual treatment of:
   - childbed fever (pueperile sepsis),
   - mastitis, breast absess,
   - prolonged abnormal bleeding.
   1.5 Define colostrum and milk.
   1.6 List steps in the care of breasts including:
   - cleaning,
   - prevention of sore, cracked nipples.
   1.7 Explain the relationship between the amount of nursing and the amount of milk produced.
   1.8 Explain the nutrition and fluid needs of a breast-feeding mother.
   1.9 Explain the method of expressing milk from breast.
   1.10 Describe the normal changes that occur in a newborn immediately after birth and within the first two weeks.
   1.11 Describe the basic needs of a newborn baby.
   1.12 Describe the signs, symptoms, and usual treatment of:
   - cradle cap,
   - diaper rash,
   - jaundice,
   - diarrhea,
   - conjunctivitis,
   - sepsis,
   - tetanus.

2. Skills - The student will:
   2.1 Demonstrate patient teaching about the nutritional needs of a breastfeeding mother.
   2.2 Demonstrate the physical examination of a baby.
   2.3 Demonstrate patient teaching about control of the uterus.
   2.4 Demonstrate patient teaching about the method of expressing milk.

III. Postpartum/Newborn Care
Lesson Plan

1. Knowledge:
   - 1.1 Definition of postpartum.
   - 1.2 Changes which occur in a woman's body during the postpartum period.
   - 1.3 Stages of lactation and the importance of each:
     - colostrum or pre-milk,
     - true milk.
   - 1.4 Relationship between suckling and milk production.
   - 1.5 Nutritional needs of a breastfeeding mother.
   - 1.6 Method of expressing milk by hand.
   - 1.7 Postpartum history of the mother:
     - problem related to delivery,
     - vaginal discharge,
     - tears,
     - breastfeeding, quantity of milk,
     - pain in the abdomen or breasts,
     - fever,
     - medication,
     - diet,
     - iron/folic acid/vitamins.
   - 1.8 Physical exam of the mother:
     - vital signs,
     - anemia,
     - breasts, if complaint,
     - abdomen.
   - 1.9 Signs, symptoms, causes, and treatment of:
     - childbed fever,
     - mastitis,
     - breast absess,
     - prolonged/abnormal bleeding.
   - 1.10 Newborn physical examination.
   - 1.11 Postpartum history of the baby:
     - breastfeeding problems,
     - sleep,
     - comforted with crying,
     - cord problems.
   - 1.12 Physical changes in a newborn after birth, normal appearance, and activity:
     - immediate (oxygen,food,warmth),
     - first two weeks (skin, stools, cord, weight),
     - general appearance.

FILENAME:PSTPRTM.OLP

1.13 Care of the newborn:
- breastfeeding,
- warmth,
- sleep,
- burping,
- spitting up,
- circumsion,
- crying,
- bathing,
- care of the cord,
- immunization.

1.14 Signs, symptoms, prevention, and treatment of :
- cradle cap,
- diaper rash,
- jaundice,
- diarrhea,
- conjunctivitis,
- sepsis,
- tetanus.

1.15 Traditional care for mother and child during postpartum:
- dangerous,
- harmless,
- useful.

2. Learning Activities:
   2.1 Lecture.
   2.2 Discussion.
   2.3 Physical exam of infant.

3. Materials:
   3.1 FM textbook,
   3.2 CMC manual.
   3.3 Whiteboard.
   3.4 Diagram of anatomy.
   3.5 Doll.

4. Skills:
   4.1 Patient teaching: control of the uterus.
   4.2 Patient teaching: method of expressing milk by hand.
   4.3 Patient teaching: nutritional needs of a breastfeeding mother.
   4.4 Demonstrate physical exam of a baby.

5. Evaluation:
   5.1 Written exam.
   5.2 Clinical evaluation of skills.

FILENAME:PSTPRTM.OLP

IV. Women's Care
Learning Objectives

1. Knowledge - The student will:
   1.1 Describe the anatomy and physiology of female reproductive organs.
   1.2 Describe the signs, symptoms, and usual treatment of
   - infertility,
   - dysmenorrhea,
   - abnormal bleeding,
   - vaginal discharge.
   1.3 Describe the menstrual cycle and recognize the fertility period.
   1.4 Define child-spacing and its advantages.
   1.5 List the different methods of child-spacing.

2. Skills - The student will:
   2.1 Explain the fertility period.
   2.1 Explain child-spacing.
   2.3 Explain methods of child-spacing.

FILENAME:WOMNSCR.OLP

IV. Women's Care
Lesson Plan

1. Knowledge:
   1.1 Anatomy of female reproductive organs:
   - ovary,
   - fallopian tubes,
   - uterus,
   - vagina,
   - vulva,

   1.2 Physiology of the female menstrual cycle:
   - ovulation,
   - menstruation,
   - fertility period.

   1.3 Signs, symptoms, treatment, prevention of:
   - vaginal discharge,
   - abnormal bleeding,
   - dysmenorrhea,
   - infertility.

   1.4 Definition of childspacing.

   1.5 Advantages of child-spacing:
   - for the mother,
   - for the children.

   1.6 Methods of childspacing (as constrained by local culture):
   - traditional methods,
   - condoms,
   - IUD,
   - pills,
   - Depo-provera,
   - abstinance during fertility period.

2. Learning Activities:
   2.1 Lecture.
   2.2 Discussion.

3. Materials:
   3.1 FM textbook.
   3.2 CMC manual.

4. Skills:
   4.1 Patient teaching: Advantages and methods of child-spacing (as per local constraint).

5. Evaluation:
   5.1 Written exam.
   5.2 Oral exam.

FILENAME:WOMNSCR.OLP

NUTRITION

Objectives: Upon completion of this unit, the student shall be able to:

1. Explain the interaction of nutrition and health, including disease resistance, healing and prevention of nutritional deficiency.

2. Explain the function of protein, carbohydrate, vitamins and minerals in nutrition.

3. Identify locally available foods in each food group.

4. Identify local customs and beliefs which may affect nutrition.

5. Explain the need for breastfeeding or substitution for it. Also nutritional needs of nursing mother.

6. Explain when and how to wean a child.

7. Describe the symptoms and prevention of marasmus and kwashiorkor.

8. Demonstrate the use of MUAC bands.

9. Demonstrate preparation of commerical and homemade ORS and Super porridge.

10. Recognize, treat and prevent anemia, goiter, Vitamin a deficiency, measles, obesity.

FILENAME:NUTRITN.OBJ

NUTRITION TEACHING PLAN 7.5 hours

1. Review basic nutrition, food groups and local sources of food for each group. Discuss local beliefs which affect diet.
(white board, food samples, FM Manual Ch.5 p.1-4)

2. Review special dietary needs of:
a. nursing mothers (FM Manual Ch.5 p.4)
b. infants (FM Manual Ch.5 p.4)
-breastfeeding
-formula (Recipe FM Manual Ch.5 p.5)
-cup and spoon preferable to bottle
c. children (CMC Manual p.117-118)
-weaning (super-porridge recipes FM Manual Ch.5 p.6-8)
d. the sick (FM Manual Ch.1 p.1 and Ch.7 p.2)
(Lecture by instructor)
(white board, baby bottle, pacifier)

3. Review MUAC, signs and treatment of marasmus, kwashiorkor.
Lecture and Demonstration by instructor. Practice by student.
(MUAC band, FM Manual Ch.5 p.9-11 and CMC Manual 121)

4. Review diarrhea prevention and treatment: Prepare commercial and homemade rice ORT.
Lecture and Demonstration by instructor. Practice by student.
(ORT handout, commercial ORT packet, rice, salt, metal container, half liter jug, cup and spoon, FM Manaual Ch. 3 p.10-12, Ch.1D p.3-12 and CMC Manual p.118)

5. Review symptoms and potential problems resulting from vitamin and mineral deficiencies, obesity, measles.
Lecture by instructor
(FM Manual Ch.5 p.11-13 and CMC Manual p.119-120)

FILENAME:NUTRITN.LP

NEUROLOGY

Learning Objectives

1. Knowledge - The student will:
   - 1.1 Define neurology and explain what the nervous system does.
   - 1.2 Explain what a headache may indicate.
   - 1.3 Identify what to look for during an examintion of a head injured patient.
   - 1.4 Explain what a stroke is, its diagnosis and treatment or referral.
   - 1.5 Define meningitis; explain its transmittal, diagnosis, and treatment.
   - 1.6 Define tetanus; explain its transmittal, diagnosis, treatment, and prevention.
   - 1.7 Define sciatica, its diagnosis, and treatment.
   - 1.8 Define coma.
   - 1.9 List causes of coma.
   - 1.10 Explain the examination of a comatose patient.
   - 1.11 Explain the care of a comatose patient.

2. Skills - The student will:
   - 2.1 Demonstrate a physical examination for neurological assessment according to the neurological exam checklist.

FILENAME:NEURO.OLP

NEUROLOGY

Lesson Plan

1. Knowledge:
   - 1.1 Neurology and function of the nervous system.
   - 1.2 Headache and its causes.
   - 1.3 Examination of a head injured patient.
   - 1.4 Definition, diagnosis, and treatment of:
     - stroke,
     - sciatica.
   - 1.5 Definition, transmittal, diagnosis, treatment, and prevention of:
     - tetanus,
     - meningitis.
   - 1.6 Definition, causes, examination, and care of a comatose patient.
   - 1.7 Reasons for each part of the neurological examination.

2. Learning activities:
   - 2.1 Lecture over knowledge component.
   - 2.2 Demonstration/return demonstration of neurological exam according to the neurological examination checklist.

3. Materials:
   - 3.1 FM textbook.
   - 3.2 CMC manual.
   - 3.3 Whiteboard.
   - 3.4 Neurological examination checklist.

4. Skills:
   - 4.1 Neurological examination according to checklist.

5. Evaluation:
   - 5.1 Written/oral exam over knowledge component.
   - 5.2 Practical skills exam based on neurological checklist.

FILENAME:NEURO.OLP

BLOOD, ANEMIA, AND LYMPHATICS

LEARNING OBJECTIVES

By the end of the session, the students will be able to:

1. Knowledge
   - 1.1 Define blood
   - 1.2 Describe the production of blook and name its' components
   - 1.3 Describe the role of each blood component
   - 1.4 Describe the oxygen-carbon dioxide exchange system
   - 1.5 Define anemia and its signs, symptoms, treatment and prevention
   - 1.6 List the pertinent medical history for blood problems
   - 1.7 Describe the anatomy and physiology of the lymphatic system
   - 1.8 List the pertinent medical history for lymphatic problems
   - 1.9 Describe the signs, symptoms, differential diagnosis and treatment of disorders causing lymphadenopathy
2. Skills
   - 2.1 Demonstrate the history and physical examination for anemia, lymphadenopathy and lymphatic disorders, and coagulation problems

FILENAME: blood.olp

BLOOD, ANEMIA AND LYMPHATICS

LESSON PLAN

1. Knowledge
   - 1.1 Definition of blood
   - 1.2 Blood components
     - a. RBC
     - b. WBC
     - c. platelets
     - d. plasma
   - 1.3 O2-CO2 exchange
   - 1.4 History in patients with blood/coagulation problems
   - 1.5 Definition of anemia
   - 1.6 Signs, symptoms, prevention and treatment of anemia
   - 1.7 Anatomy and physiology of lymphatics
   - 1.8 History in patients with lymphatic problems
   - 1.9 Signs, symptoms, differential diagnosis and treatment of patients with lymphadenopathy
2. Learning Activities
   - 2.1 Lecture on knowledge component
   - 2.2 Discussion
   - 2.3 Demonstration of appropriate history and physical
3. Materials
   - 3.1 Board/marker
   - 3.2 FM, CMC and Clinical Skills Handbook
   - 3.3 Diagram of blood components and lymphatic system
4. Skills
   - 4.1 Demonstrate history and physical examination of patients with blood, anemia and lymphatic problems
5. Evaluation
   - 5.1 Written examination
   - 5.2 Skills practical examination

FILENAME: blood.olp

ENDOCRINE

Learning Objectives - The student will be able to:

1. Knowledge
   - 1.1 Define hyperthyroidism (thyrotoxicosis).
   - 1.2 List four causes of hyperthyroidism.
   - 1.3 Describe five signs and symptoms of hyperthyroidism.
   - 1.4 Name two serious complications of hyperthyroidism.
   - 1.5 Describe two methods of treatment for hyperthyroidism.
   - 1.6 Define myxedema (hypothyroidism).
   - 1.7 List six signs and symptoms of hypothyroidism.
   - 1.8 Identify the appropriate treatment by a paramedic of a patient with hypothyroidism.
   - 1.9 Name the two classifications of diabetes melitus.
   - 1.10 List six signs and symptoms of diabetes melitus.
   - 1.11 Describe four types of treatment for the diabetic.
   - 1.12 Describe the differences between hyper- and hypoglycemic coma.
   - 1.13 Explain the use of sliding scale insulin.
   - 1.14 Describe what to do for a patient suffering from hypoglycemia.

2. Skills
   - 2.1 Correctly diagnose and treat a patient with hyperthyroidism.
   - 2.2 Correctly diagnose and treat a patient with hypothyroidism.
   - 2.3 Correctly diagnose and treat a patient with hyperglycemia.
   - 2.4 Correctly diagnose and treat a patient with hypoglycemia.

FILENAME:ENDOCRIN.OLP

ENDOCRINE

Lesson Plan

1. Knowledge:
   - 1.1 Definitions of:
     - hyperthyroidism (thyroidtoxicosis),
     - hypothyroidism (myxedema),
     - hyperglycemia,
     - hypoglycemia.
   - 1.2 Signs and symptoms of:
     - hyperthyroidism (5),
     - hypothyroidism (6),
     - diabetes mellitus (6).
   - 1.3 Four causes of hyperthyroidism.
   - 1.4 Two serious complications of hyperthyroidism.
   - 1.5 Two classifications of diabetes mellitus.
   - 1.6 Differences between hyper- and hypoglycemic coma.
   - 1.7 Use of sliding scale insulin.
   - 1.8 Treatment of:
     - hyperthyroidism (2),
     - hypothyroidism,
     - diabetes (4),
     - hypoglycemia.

2. Learning Activities:
   - 2.1 Lecture of knowledge component.
   - 2.2 Discussion.
   - 2.3 Clinical review of endocrine cases.

3. Materials:
   - 3.1 Whiteboard.
   - 3.2 Chart.
   - 3.3 FM textbook.
   - 3.4 CMC manual.

4. Skills:
   - 4.1 Diagnose and treat a patient with:
     - hyperthyroidism,
     - hypothyroidism,
     - hyperglycemia,
     - hypoglycemia.
   - 4.2 Use of sliding scale insulin.

5. Evaluation:
   - 5.1 Oral questions.
   - 5.2 Written exam.
   - 5.3 Clinical practice under supervision.

FILENAME:ENDOCRIN.OLP

SKIN

Learning Objectives

1. Knowledge - The student will:
   - 1.1 Explain the early and terminal stages of impetigo.
   - 1.2 Explain what instructions to give the mother of a child with lesions of impetigo.
   - 1.3 Explain how to manage a case of impetigo.
   - 1.4 State indications for incising a folliculitis.
   - 1.5 State indications for prescribing penicillin for folliculitis.
   - 1.6 Explain what underlying conditions could be suspected in a patient with recurrent folliculitis.
   - 1.7 Explain what procedure would be advised for the family of a scabies patient.
   - 1.8 Explain where scabies occurs on the body.
   - 1.9 Explain the treatment for scabies in:
     - adults,
     - children.
   - 1.10 Explain why all family members (or residents of the same household) of a patient infected with lice should be examined in addition to the patient.
   - 1.11 Explain the management of lice.
   - 1.12 Explain the differential diagnosis and treatment for itching and dry skin.
   - 1.13 Describe four signs and symptoms of abscess.
   - 1.14 Identify appropriate treatment of a patient with an abscess.
   - 1.15 Describe four signs and symptoms of acne.
   - 1.16 Explain the management of acne.
   - 1.17 Describe the appearance of cellulitis.
   - 1.18 Explain the management of cellulitis.
   - 1.19 List signs and symptoms of herpes simplex and herpes zoster.
   - 1.20 Explain management of herpes zoster.
   - 1.21 Explain the differential diagnosis of diaper rash.
   - 1.22 List treatment for diaper rash.
   - 1.23 Describe the diagnosis and treatment of dermatophytosis.
   - 1.24 Describe the diagnosis and treatment of allergic skin disease.
   - 1.25 Describe the clinical picture of allergic drug reaction.
   - 1.26 List four causes of hives (urticaria).
   - 1.27 Explain the skin changes that occur as contact dematitis develops.
   - 1.28 Explain the treatment of eczema.
   - 1.29 List three signs/symptoms of leprosy.
   - 1.30 List four signs/symptoms of leishmaniasis.

FILENAME:SKIN.OLP

2. Skills - The student will:
   2.1 Demonstrate a physical examination of skin.
   2.2 Diagnose and treat impetigo.
   2.3 Diagnose and treat folliculitis.
   2.4 Diagnose and treat scabies.
   2.5 Diagnose and treat pediculosis.
   2.6 Diagnose and treat a patient with itching and dry skin.
   2.7 Diagnose and treat an abscess.
   2.8 Diagnose and treat acne.
   2.9 Diagnose and treat cellulitis.
   2.10 Diagnose and treat herpes simplex and herpes zoster.
   2.11 Diagnose and treat dermatophytosis.
   2.12 Diagnose and treat allergic skin disease.
   2.13 Diagnose and treat hives (urticaria).
   2.14 Diagnose and treat contact dermatitis.
   2.15 Diagnose and treat eczema.
   2.16 Diagnose and refer leprosy.
   2.17 Diagnose and refer leishmaniasis.

FILENAME:SKIN.OLP

SKIN

Lesson Plan

1. Knowledge:
   - 1.1 Signs, symptoms, treatment, and prevention of impetigo.
   - 1.2 Signs, symptoms, treatment, and prevention of folliculitis.
   - 1.3 Signs, symptoms, treatment, and prevention of scabies.
   - 1.4 Signs, symptoms, treatment, and prevention of pediculosis.
   - 1.5 Signs, symptoms, treatment, and prevention of itching and dry skin.
   - 1.6 Signs, symptoms, treatment, and prevention of abscesses.
   - 1.7 Signs, symptoms, treatment, and prevention of acne.
   - 1.8 Signs, symptoms, treatment, and prevention of cellulitis.
   - 1.9 Signs, symptoms, treatment, and prevention of herpes simplex and herpes zoster.
   - 1.10 Signs, symptoms, treatment, and prevention of candidiasis.
   - 1.11 Signs, symptoms, treatment, and prevention of dermatophytosis.
   - 1.12 Signs, symptoms, treatment, and prevention of allergic skin disease.
   - 1.13 Signs, symptoms, treatment, and prevention of hives (urticaria).
   - 1.14 Signs, symptoms, treatment, and prevention of contact dermatitis.
   - 1.15 Signs, symptoms, treatment, and prevention of eczema.
   - 1.16 Signs and symptoms of leprosy.
   - 1.17 Signs and symptoms of leishmaniasis.
   - 1.18 The role of sanitation and hygiene for prevention of skin disease.

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Discussion.
   - 2.3 Demonstration/return demonstration of skin exam.

3. Materials:
   - 3.1 FM textbook.
   - 3.2 CMC manual.
   - 3.1 Checklist.

4. Skills:
   - 4.1 Physical examination of skin as per physical exam checklist.
   - 4.2 Differential diagnosis of skin diseases.
   - 4.3 Patient teaching: Explain the role of sanitation and hygiene for prevention of skin disease.

FILENAME:SKIN.OLP

5. Evaluation:
    5.1 Written exam.
    5.2 Practical skills exam.
    5.3 Ongoing clinical skills evaluation.

FILENAME:SKIN.OLP

IMMUNIZATION

Learning Objectives: By the end of this session, the student will learn and be able to:

1. Knowledge:
   - 1.1 Explain the basics of the immune response.
   - 1.2 Identify the types of immunity and how they are acquired.
   - 1.3 Identify factors which can weaken or strengthen the immune system (e.g. Vit. A, malnutrition, etc.).
   - 1.4 Identify the six EPI target diseases and the immunization schedule for each of them.
   - 1.5 Explain the importance of immunizations in disease prevention and for maintenance of health for the community and the individual.
   - 1.6 Identify and explain target populations for immunizations.
   - 1.7 Explain the importance of the "cold chain."
   - 1.8 Describe possible reactions to immunizations.

2. Skills:
   - 2.1 Explain what parents should be taught about immunization schedules and reactions to the vaccines.
   - 2.2 Correctly administer a vaccine.

FILENAME:IMMUNE.OLP

IMMUNIZATION

Lesson Plan

1. Knowledge:
   - 1.1 Parts and function of the immune system.
   - 1.2 How the body's immune system contributes to good health.
   - 1.3 The action of immunizations on the body's immune system.
   - 1.4 Factors which strengthen (e.g. Vit. A) or weaken (e.g. malnutrition) the immune system.
   - 1.5 Target EPI disease recognition, prevention, mitigation of outbreaks in the community, and treatment.
   - 1.6 Basic information on EPI immunization program:
     - types of immunizations given,
     - target populations,
     - schedules,
     - reactions to immunizations,
     - cold chain maintenance,
     - record-keeping.

2. Learning Activities:
   - 2.1 Classroom lecture and discussion of knowledge component.
   - 2.2 Assign student presentations.
   - 2.3 Field trip to IRC-EPI center.
   - 2.4 Participation in a mobile immunization center.

3. Materials:
   - 3.1 Whiteboard.
   - 3.2 Handout of function of immune system.
   - 3.3 Transportation to IRC-EPI center.

4. Skills:
   - 4.1 Administration of vaccinations.

5. Evaluation:
   - 5.1 Written or oral exam.
   - 5.2 Practical exam of tetanus shot administration by each student to another student and short instruction of the "patient" (e.g. reactions, importance of, etc.)
   - 5.3 Evaluations of presentations.

FILENAME:IMMUNE.OLP

ENVIRONMENTAL HEALTH

Learning Objectives

1. Knowledge - The student will:
   - 1.1 Define and explain the concept of preventive health care.
   - 1.2 Identify the components of prevention and explain why each is important:
     - personal hygiene;
     - food handling and sanitation;
     - clean water supply;
     - waste disposal: human, animal, clinic, household;
     - vector control: rodent, insect.
   - 1.3 Identify measures for controlling and preventing the spread of communicable diseases for each component.
   - 1.4 Identify health problems caused by the lack of preventive health measures.
   - 1.5 Describe how each of these components is managed in his:
     - clinic,
     - community.
   - 1.6 Identify areas of improvement in:
     - student's clinic and community,
     - the FM community.
   - 1.7 Describe actions for improvement in:
     - student's clinic and community,
     - the FM community.
   - 1.8 Explain the importance of the clinic and the paramedic as a role model for the community.

2. Skills -The student will:
   - 2.1 Demonstrate by example: correct health practices which prevent the spread of disease and prevent accidents.
   - 2.2 Demonstrate: an appeal to the community for support of a public health improvement.

FILENAME:ENVHLTH.OLP

ENVIRONMENTAL HEALTH

Lesson Plan

1. Knowledge:
   - 1.1 Concept of preventive health.
   - 1.2 Components of prevention:
     - personal hygiene;
     - food handling and sanitation;
     - clean water supply;
     - waste disposal: human, animal, clinic, household;
     - vector control: rodent, insect.
   - 1.3 Measures for controlling and preventing diseases for each component.
   - 1.4 Health problems which can result because preventive health practices aren't used.
   - 1.5 Importance of the clinic and the paramedic in being a role model of preventive health care for the community.

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Discussion.
   - 2.3 Prepare a written assessment of the student's clinic describing:
     - current practices which are good,
     - current practices which are bad or harmful,
     - improvements which are easy to make,
     - improvements which will take a longer time to make (Why? How might it be possible to overcome the obstacles?).
   - 2.4 Prepare and present an appeal for community support to improve one health practice and include:
     - why it is important,
     - the student's idea for how to do it,
     - how the community can support this project,
     - why it's to the benefit of the community to support it.
   - 2.5 Tour the FM grounds to assess preventive measures in use and where improvements could be made.

3. Materials:
   - 3.1 Whiteboard.
   - 3.2 Handouts.

4. Skills:
   - 4.1 Demonstration of knowledge of preventive health by daily practice of personal hygiene in the clinic and hospital.

5. Evaluation:
   - 5.1 Evaluation of student paper.
   - 5.2 Evaluation of student speech.
   - 5.3 Written exam.

FILENAME:ENVHLTH.OLP

HEALTH TEACHING

Learning Objectives

1. Knowledge - The student will:
   - 1.1 State the primary purpose of education.
   - 1.2 Identify the level of local knowledge.
   - 1.3 Identify health behaviors the community could improve.
   - 1.4 Explain evaluation of teaching objectives.
   - 1.5 Identify local resources which can be used to teach health messages (material, people, books, etc.).
   - 1.6 Explain methods of teaching health messages:
     - lecture,
     - demonstration/return demonstration,
     - visual aids,
     - role playing,
     - games,
     - stories, plays, skits,
     - clinic teaching,
     - role modeling.
   - 1.7 Explain why some teaching methods are more effective than others.
   - 1.8 Explain the guidelines for effective teaching.
   - 1.9 Identify ways to motivate the community.
   - 1.10 Explain the importance of modeling correct practices by health providers (paramedics, doctors, nurses) in the clinic and in personal life.

2. Skills - The student will:
   - 2.1 Prepare a 15 minute health message (for local people) to present to the class.

FILENAME:HLTHED.OLP

HEALTH TEACHING

Lesson Plan

1. Knowledge:
   - 1.1 Purpose of education.
   - 1.2 Paramedic's educational role in the community.
   - 1.3 Concept of role modeling.
   - 1.4 The community's role in health care.
   - 1.5 Methods of teaching health messages:
     - lecture,
     - demonstration/return demonstration,
     - visual aids,
     - games,
     - stories, plays, skits,
     - clinic teaching,
     - role modeling.
   - 1.6 Guidelines for effective teaching.
   - 1.7 Methods to evaluate teaching objectives.
   - 1.8 Ways to motivate a community and individuals.
   - 1.9 Appropriate messages and behaviors to teach the local community.

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Discussion.
   - 2.3 Student presentations.
   - 2.4 Student evaluation of presentations.
   - 2.5 Scenarios and case studies.
   - 2.6 Assessment of local resources available for health teaching.

3. Materials:
   - 3.1 Whiteboard.
   - 3.2 Scenarios, case studies.
   - 3.3 "Local resources."

4. Skills:
   - 4.1 Presentation to class of health messages which model effective teaching principles. (Lecture may not be used.)

5. Evaluation:
   - 5.1 Evaluation of student presentation.
   - 5.2 Written exam.

FILENAME:HLTHED.OLP

INPATIENT_MANAGEMENT

Objectives: Upon completion of this unit, the student shall be able to:

1. Identify and demonstrate methods of infection control, such as the use of sterile and isolation technique, and by meeting criteria in the Handwashing Checklist.

2. Explain how to provide comfort care and prevent complications when caring for the sick.

3. Demonstrate respiratory exercises and postural drainage.

4. Demonstrate correct insertion, care and discontinuance of a foley catheter, meeting the criteria in the Bladder Catheterization Checklist.

5. Demonstrate correct insertion, care and discontinuance of a nasogastric tube, meeting the criteria in the Nasogastric Tube Insertion Checklist.

FILENAME: INPTMGT.OBJ

INPATIENT MANAGEMENT: TP 2.5 hours

1. Review handwashing and asepsis.
   Lecture/demonstration by instructor. Practice by student. Final demonstration by student shall meet criteria in the Handwashing Checklist.

2. Review sterile and isolation technique.
   Lecture/demonstration by instructor. Practice by student. Final demonstration by student shall meet criteria in Establish and Maintain a Sterile Field Checklist.
   (FM manual Ch.12 p.1-3, Handout: Tips for Sterile Technique)

3. Review how to provide comfort care and prevent complications when caring for the sick: positioning, personal hygiene, diet, prevention and treatment of bedsores, intake and output.
   Lecture/demonstration by instructor.
   (FM Manual Ch.8 p.1-3)

4. Review respiratory exercises and postural drainage.
   Lecture/demonstration by instructor.
   (FM Manual Ch.1b p.5)

5. Review correct insertion, care and discontinuance of a foley catheter.
   Lecture/demonstration by instructor. Practice by student. Final Demonstration by student shall meeting criteria in the Bladder Catheterization Checklist.
   (FM Manual Ch.10 p.3)

6. Review insertion, care and discontinuance of a nasogastric tube.
   Lecture/demonstration by instructor. Practice by student. Final demonstration by student shall meet criteria in the Nasogastric Tube Insertion Checklist.
   (FM Manual Ch.10 p.3-4)

FILENAME: INPTMGT.LP

STERILIZATION

Objectives: Upon completion of this unit, the student shall be able to:

1. Identify and demonstrate appropriate sterilization methods for field use, meeting criteria in the Instrument Sterilization Checklist.

2. Demonstrate appropriate cleaning, care and handling of equipment.

3. Demonstrate correct asepsis and sterile technique in handling sterile materials and instruments, meeting the criteria in the Establish and Maintain a Sterile Field Checklist.

4. Demonstrate correct disposal of contaminated fluids and materials.

FILENAME:STERILE.OBJ

STERILIZATION: TEACHING PLAN 2.5 hours

1. Review appropriate sterilization methods for field use: heat moisture, steam.
   Lecture/demonstration by instructor. Student will practice. Final demonstration by student must meet criteria in the Instrument Sterilization Checklist.
   (FM Manual Ch.10 p.1)

2. Review cleaning, care and handling of equipment and materials.
   Lecture/demonstration by instructor.
   (FM Manual Ch.10 p.3)

3. Review asepsis and sterile technique in handling sterile materials and instruments.
   Lecture/demonstration by instructor. Student will practice. Final demonstration by student must meet criteria in the Establish and Maintain a Sterile Field Checklist.
   (FM manual Ch.12 p.1-3, Handout: Tips for Sterile Technique)

4. Review correct disposal of contaminated fluids and materials.
   Lecture/demonstration by instructor.

FILENAME:STERILE.LP

MENTAL HEALTH/DRUG ABUSE

I. Mental Health

Learning Objectives - The student will be able to:

1.1 Identify physical complaints associated with stress.
1.2 Identify and refer psychosis.
1.3 Explain prevention, recognition, and treatment of:
- anxiety,
- insomnia,
- agitation,
- depression.
1.4 Explain "post-traumatic stress syndrome."
1.5 Describe traditional and modern "treatments" for emotional problems.
1.6 Explain the danger from overuse of diazapam.

FILENAME:MENTHLTH.OLP

II. Drug Abuse

Learning Objectives - The student will be able to:

1.1 Explain addiction
1.2 Identify traditional uses of opium in Afghan culture:
- medicinal,
- non-medicinal.
1.3 Identify non-pharmaceutical drugs in traditional use:
- charas (hashish),
- naswar (tobacco),
- heroin,
- other.
1.4 Describe physiologic effects of hashish, opium, morphine, heroin, naswar.
1.5 Explain interrelationship between drug abuse and mental illness/depression including inappropriate use of pain relief and anti-anxiety drugs (diazapam).
1.6 Explain relationship between naswar and oral cancer.

FILENAME:MENTHLTH.OLP

MENTAL HEALTH/DRUG ABUSE

I. Mental Health
Lesson Plan

1. Knowledge:
   1.1 Psychological signs and symptoms likely to be seen in a clinical setting including complaints of:
   - anxiety,
   - insomnia,
   - anger,
   - depression,
   - poor concentration,
   - nightmares,
   - changes in sleep, appetite, libido,
   - impaired social relations,
   - feelings of isolation.

   1.2 Somatic complaints commonly associated with psychological disturbances:
   - "body pain,"
   - general aches and pains,
   - skin rashes,
   - gastritis/ulcer/poor digestion,
   - fatigue,
   - headache.

   1.3 Factors contributing to poor mental health among refugees.
   1.4 Post-traumatic stress syndrome and treatment.
   1.5 Traditional and modern "treatments" for emotional problems and stress.
   1.6 Dangers of overuse of diazapam.
   1.7 Where psychotic patients can be referred.

2. Learning Activities:
   2.1 Lecture over knowledge component.
   2.2 Group discussion of ways people can deal with stress to reduce it or make it more manageable.

3. Materials:
   3.1 Whiteboard.
   3.2 CMC manual.
   3.3 Freedom Medicine textbook.

4. Skills:
   4.1 Demonstrate ability to assess for possible underlying mental health problems.
   4.2 Demonstrate patient teaching:
   - reassurance that symptoms are a response to stress,
   - ways to manage stress.

   4.3 Identify patient sources of community and family support.
   4.4 Prescribe medication for severe anxiety according to CMC guidelines and demonstrate patient teaching for medications.

5. Evaluation:
   5.1 Writen exam.

FILENAME:MENTHLTH:OLP

II. Drug Abuse
Lesson Plan

1. Knowledge:
   1.1 What addiction is and how it occurs.
   1.2 Why drug abuse is increasing in the refugee population.
   1.3 Relationship between drug abuse and mental illness and/or depression.
   1.4 Medicinal and non-medicinal uses of opium in traditional Afghan society.
   1.5 Non-pharmaceutical drugs which are abused and what their physiological effects are:
   - charas (hashish),
   - opium,
   - heroin,
   - alchohol,
   - other.
   1.6 Pharmaceutical drugs which are abused and what their physiological effects are:
   - diazapam,
   - morphine,
   - other.
   1.7 Dangers of overuse of diazapam.
   1.8 Relationship of naswar use and oral cancer.

2. Learning Activities:
   2.1 Lecture of knowledge component.
   2.2 Group discussion of students' knowledge of the types and availability of drugs in their villages.
   2.3 Discussion of students' beliefs about use and abuse of drugs.
   2.4 Discussion of Koranic passages referring to drug use and abuse.

3. Materials:
   3.1 Whiteboard.
   3.2 CMC manual.
   3.3 Freedom Medicine textbook.
   3.4 Koran.

4. Skills:
   4.1 Demonstrate patient and community teaching about abuse of drugs.
   4.2 Demonstrate patient teaching of the dangers from overuse of diazapam.

5. Evaluation:
   5.1 Written exam.

FILENAME:MENTHLTH.OLP

HEALTH SYSTEM MANAGEMENT

Learning Objectives

1. Knowledge - The student will:
   - 1.1 List and explain the details of a referral form.
   - 1.2 Explain the importance of sending written documentation of history and physical findings, reason for referral, and any treatment with the patient.
   - 1.3 List and explain the details of a green book.
   - 1.4 List and explain the details of an out/inpatient record.
   - 1.5 Describe medical resources available in a hospital and how he can use them.
   - 1.6 Describe referral sources he can find in Afghanistan and how he can cooperate with them.
   - 1.7 Explain what measures must be taken to maintain the clinic and keep it clean.
   - 1.8 Explain proper disposal of waste products:
     - human,
     - clinic.
   - 1.9 List the conditions for proper storage of supplies and drugs.
   - 1.10 Describe record-keeping and resupply of supplies, drugs, and equipment.
   - 1.11 Define the role of a supervisor.
   - 1.12 Define the possibility for education in his community.

2. Skills - The student will:
   - 2.1 Correctly write a referral form.
   - 2.2 Correctly fill out his green book.
   - 2.3 Correctly use an out/inpatient record.

FILENAME:HSMGMT.OLP

HEALTH SYSTEM MANAGEMENT

Lesson Plan

1. Knowledge:
   - 1.1 Important points which should be in a referral form.
   - 1.2 How to use and fill in a green book.
   - 1.3 How to use and fill in an out/inpatient record.
   - 1.4 Medical resources of a hospital.
   - 1.5 Other referral resources available in Afghanistan.
   - 1.6 Correct steps to keep a clinic and the surrounding yard clean.
   - 1.7 Proper disposal of waste products:
     - human,
     - clinic.
   - 1.8 Correct storage of drugs, supplies, and equipment.
   - 1.9 Record-keeping of drugs, supplies, and equipment.
   - 1.10 Resupply of drugs, supplies, and equipment.
   - 1.11 Role of a supervisor.
   - 1.12 Potential for community outreach by the paramedic:
     - what can be taught,
     - where,
     - when,
     - whose cooperation should be sought for support.

2. Learning Activities:
   - 2.1 Lecture.
   - 2.2 Discussion.
   - 2.3 Practice filling out patient and record-keeping forms.

3. Materials:
   - 3.1 Whiteboard.
   - 3.2 Forms:
     - referral,
     - out/inpatient forms,
     - green books,
     - drug and supply forms.
   - 3.3 Case studies.
   - 3.4 Handout on drug and supply storage.
   - 3.5 FM textbook.

4. Skills:
   - 4.1 Correct use of green books and other patient related forms.
   - 4.2 Correct use of clinic management forms relating to drugs, supplies, and equipment.

5. Evaluation:
   - 5.1 Written exam.
   - 5.2 Demonstration of correct use of record forms in clinic practice.

FILENAME:HSMGMT.OLP

MINE AWARENESS

Learning Objectives

1. Knowledge - The student will:
   - 1.1 Demonstrate familiarity with the dangers of unexploded ordinance.
   - 1.2 Correctly identify major types of mines found in Afghanistan.
   - 1.3 Demonstrate familiarity with Operation Salaam De-Mining and Mine Awareness goals and materials.

FILENAME:D-MINE.OLP

MINE AWARENESS

· Lesson Plan

1. Knowledge:
   1.1 Operation Salaam Mine Awareness materials.
   1.2 Referral resources for found explosives.

2. Learning Activities:
   2.1 Lecture.
   2.2 Demonstration.

3. Materials:
   3.1 Whiteboard.
   3.2 Operation Salaam models of explosives.
   3.3 Operation Salaam posters.

4. Skills:
   4.1 Identification of models of mines.

5. Evaluation:
   5.1 As per Operation Salaam Mine Awareness protocols.

FILENAME:D-MINE.OLP