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ANNEX IV

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GUIDELINES FOR TASK-SPECIFIC CURRICULUM DEVELOPMENT



FOR

A.I.D.
Reference Center
Room 1866 MB

MATERNAL AND CHILD HEALTH CARE TRAINING



Preliminary Issue

**ORGANIZATION FOR
REHABILITATION THROUGH TRAINING**

GUIDELINES FOR TASK-SPECIFIC
CURRICULUM DEVELOPMENT

for

MATERNAL AND CHILD HEALTH CARE TRAINING

(Based on the training program developed for
MCH Centers, Kinshasa, Republic of Zaire)

Preliminary Issue

A. I. D.
Reference Center
Room 1606 MB

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PREFACE

There are many health workers for whom application of Maternal and Child Health (MCH) care is a novelty. Most workers receive hospital-oriented training or training geared to curative care of hospitalized patients, with little or no practice in combining preventive and curative aspects of health care in a community setting. This represents a fundamental aspect of maternal and child health protection.

The Guidelines were formulated as a result of designing a training program for auxiliary nurses and aides being prepared for Maternal and Child Health Centers in Kinshasa, Republic of Zaire. The Centers offer care for mothers and children through an "under-five" clinic, pre- and postnatal consultations, a maternity, and child spacing clinic.

In order to keep the content of the training course relevant to the job and in order to accomplish training within a relatively short period of time, a task-specific method was applied to define curriculum objectives and content. Although task-oriented training is receiving increasing attention, there have been few attempts to apply it to the training of health personnel in developing countries.

These Guidelines are not intended as a prescription for a course design or for lesson plans, nor do they discuss teaching techniques. Rather, their purpose is to share with those who are concerned with training for MCH our experience in developing job-specific training.

We would welcome comments on this preliminary issue.

INTRODUCTION

Maternal and Child Health services are increasingly being given priority attention in developing countries. Not only do women of child-bearing age and children comprise approximately two-thirds of the population, but they represent a group particularly vulnerable, with high levels of morbidity and mortality.

It has now been demonstrated that relatively simple measures for mothers during pregnancy and delivery and for children during the first six years of life can go far in improving health and diminishing illness.

Health personnel - especially those familiar with MCH - are in short supply throughout the developing world. Therefore, in order to offer effective curative and preventive care to large population groups, additional personnel must be trained in a short period of time and used flexibly.

Effective training for comprehensive MCH care demands approaches which differ somewhat from those conventionally used for health training. Particular efforts are required to:

1. Combine curative and preventive measures;
2. Work in a team context;
3. Give services in a sympathetic way, with attention to the patient's dignity;
4. Place major emphasis on education and motivation;
5. Provide a family and community orientation.

These emphases are often not provided in health training institutions, where training of personnel is geared to the care of acutely ill hospitalized patients. An orientation highlighting the above approaches is needed - both for those with some previous training and those without prior health experience.

In 1974, ORT began a project in Kinshasa to develop a model for urban MCH centers. Two Centers were established which integrate in a systematic fashion preventive and curative care - that is, regular health surveillance, prevention of illness through prophylaxis and education, early diagnosis and treatment. Consultations for children under five, prenatal care, delivery and postnatal care, and family planning services were initiated.

Much responsibility usually assumed by doctors was given to nurses and many activities were carried out by personnel with no previous nursing training. Standardization of treatment, preparation of precise written "Directives" on management of common problems, and a clear supervisory system makes this downward delegation of responsibility possible. A detailed description of the Centers can be found in a separate brochure entitled "The Maternal and Child Health Centers".

An ORT team prepared a training program for nurses of various levels of education and a program for aides and assistants who had had no previous formal health training.¹⁾ Certain dissatisfactions with the initial experience led the ORT team to look for a more pragmatic training approach, based on the specific tasks which the personnel would be asked to perform. If the trainer knows exactly what work is required of the personnel, what tasks are needed to carry out the Center's work, he can gear the training program specifically - in terms of teaching the required knowledge, skills, attitudes - and thus instruct personnel more efficiently.

1) Auxiliary nurses in Kinshasa have had 8 years of general education and 3 years of nursing and/or midwifery training.

Inspired by a method for curriculum development through task analysis used in the N.Y.C. Health Services Mobility Survey (E. Gilpatrick, Director), the ORT training team prepared a program for auxiliary nurses and aides based on description of the tasks which are needed to carry out the work of each clinic of the Centers.

Each task can be described as a sequence of steps. Referred to as a "task analysis", this step-by-step enumeration provides the basis for determining what knowledge, skills and attitudes are needed for carrying out the task. Thus, the objectives of the curriculum for a training program geared to task performance become clear. These "curriculum objectives" guide the trainer in determining exactly what should be taught. With constant reference to the task analysis, the trainer is able to select essential subject matter which must be mastered by the students for effective performance. Subject matter which may be interesting, relevant and important, but not essential to the task, will be differentiated. In this way, the core content of the training program is defined. Selected subject matter can then be grouped in some convenient way to make it meaningful to the student and to allow the trainer to work out a time schedule and lesson plans.

These Guidelines attempt to review briefly how the task-oriented curriculum was developed.

Section 1: Discusses tasks, shows how they can be analyzed, and, for illustrative purposes, gives the task analyses of the prenatal and "under-five" clinics.

Section 2: Shows how step-by-step task descriptions were used to determine curriculum objectives and how these objectives are used to elaborate the curriculum content. An illustration of a convenient approach to organizing the curriculum into units is given.

Section 3: Gives an example of lesson programs which arrange the curriculum for an "under-five" and prenatal training program into a one-week course for Level I (lower echelon) and a two-week course for Level II (auxiliary nurses).

These Guidelines illustrate an approach for elaborating a job-relevant curriculum. They are by no means intended as a fixed formula for a training program. Extensive adaptation will be required to make sure that local approaches, possibilities and needs are taken into account in transferring them to other situations.

They are offered with the hope that they may be useful to others who are required to train personnel for MCH activities.

SECTION 1

Task Analysis and Description

It has already been noted that a convenient and efficient way of describing health activity is the analytic description of its component tasks. "Task analysis" refers to the division of specific tasks into sequences and their description in a step-by-step way. In the context of a training program, this description provides students with a clear understanding of the work they are to perform.

For our purposes, a task consists of an arrangement of activities or actions leading to a useful outcome. For example: in the "under-five" clinic, the following task - "Weigh a child and note the weight on the weight chart" - has a useful result: the weight of the child is written down on his card. This is useful in at least two ways:

- it can be used for comparison on the next visit, or
- it can be used during the same visit as information for another task, for example, task No. 5 - "Provide regular surveillance and maintenance of child health."

One can now also see why just weighing a child and not writing it down on his card is not useful and therefore not a complete task. In a busy clinic, his weight can easily be forgotten or mixed up with someone else's weight.

Looking at some other tasks, for example, tasks No. 2 - "Collect and record background information on the child and his family", No. 4 - "Assess the child's state of health and record it", or tasks No. 15 - "Weigh a woman, measure her height and record it", No. 16 - "Take the blood pressure and record it", and No. 17 - "Measure the height of the fundus, listen to the fetal heartbeat and record it", one will see that

each leads to a useful result, usually providing information which is important in itself or for carrying out another task.

Task descriptions also make it possible to divide the work without creating confusion over who does what. In addition, task descriptions are useful in standardizing services and evaluating performance. They define a practical unit of work and thus describe objectively the necessary activities. In general, a task is performed by one person. However, one worker may be assigned one or several different tasks by whomever is responsible for management of the clinic. They will thus also be useful in a more flexible approach to allocation of personnel, relating job assignments to work experience rather than to formal educational qualifications.

The 20 tasks in these Guidelines describe the clinical work performed in the "under-five" and prenatal clinics of the MCH Centers in Kinshasa. They are performed by auxiliary nurses and aides under the supervision of registered nurses, within the framework of the Mama Yemo Hospital, which serves as a back-up and referral center. In another setting, task analysis would reflect the different system. We have chosen to divide the tasks into two levels: Level I are simpler and require less training; Level II require a broader range of knowledge and training.

The order of task descriptions follows more or less the sequence in which they are carried out: In the "under-five" clinic, the mothers and children attend a nutrition demonstration and a health education class (task No. 1) before entering the area where health surveillance (tasks Nos. 2, 3, 4, 5) and treatment of minor illnesses (task No. 8) is provided. (In the Kinshasa Centers, tasks Nos. 4, 5 and 8 are performed by the same person. In another situation, more than one worker could be assigned to these tasks.) In the case of more serious illness, the children will see a registered nurse for further diagnosis and treatment or referral. Vaccinations are given in the "vaccination room" (task No. 7). Children in the "at-risk" category receive special attention (tasks Nos. 6, 10).

As frequently as possible, visits are made in the neighborhood to promote the work of the clinic (task No. 11). A laboratory is available for simple tests (task No. 12).

In the prenatal clinic, at the first visit, a medical history is established (task No. 13) and, as on follow-up visits, education classes are held, measurements are taken (tasks Nos. 14, 15, 16, 17) and presence of viable pregnancy checked (tasks Nos. 18, 19). "High-risk" women are specially followed (task No. 20) with a physician who regularly attends the clinic.

How Tasks are Analyzed

Task identification is arrived at by interviews, observation, study of official job descriptions and organizational charts and objectives. The analytic description includes the following information:

1. In which service it is carried out: "UNDER-FIVE" or PRENATAL (or some other clinic. Indicate the Level.
2. A concise RESUME of the task, listing key elements and, where necessary, its relation to other tasks. For example, task No. 8 - "Diagnose, treat or refer a sick child. This task follows tasks Nos. 4 and 5."
3. Conditions which must be present in the ENVIRONMENT where the task is carried out with respect to physical setting and attitude of the performer for effective interaction. For example, in task No. 8 - "A quiet place and an amicable approach."
4. The EQUIPMENT used.
5. An indication of the EXTENT OF RESPONSIBILITY allowed by the task, i.e., how much decision-making latitude the tasks permits and what

type of direct supervision (continuous or periodic) is needed.

6. A step-by-step outline of the task. Here we have chosen a certain logical sequence and grouping of activities, in full awareness of other equally acceptable choices. What may appear to be an unevenness in the degree of detail with which seemingly routine steps are described reflects, however, the desire to emphasize task elements which are frequently neglected and require particular attention.

In any clinic where responsibility is delegated to lower echelon personnel, a set of technical directives is required. Such "Directives"²⁾ were established in the Kinshasa Centers. Because of their specificity to the local situation, they are referred to in the task descriptions without procedural detail, although the steps indicated in the Directives are obviously part of the complete task.

Skills in simple, Level I tasks - which can be performed by aides without previous training - are described in greater detail than Level II tasks, which are carried out by auxiliary nurses with previous training.

In summary, in the context of a training program, task analysis clarifies the work requirements and thus defines training needs; it also aids in assessing the entering level of knowledge and skills, and in evaluating those acquired during the training program.

2) The "Medical Directives" give precise instructions for handling commonly encountered clinical problems. Examples can be found in the brochure "The Maternal and Child Health Centers".

TASK No. 1

UNDER FIVE - Level I

RESUME: GIVE A NUTRITIONAL DEMONSTRATION OR A SIMPLE HEALTH TALK.

ENVIRONMENT: A quiet, ventilated place where a group can gather. An amicable approach is essential.

EQUIPMENT: Cheap, nutritious, locally available food, material and utensils used commonly by mothers, cups and spoons, audio-visual material, attendance sheets, chairs or stools, table and pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision and has the latitude to determine individual counselling needs.

STEPS IN PERFORMING THIS TASK:

1. Check to see that the location is clean and that all the material is at hand; review the recipe and the subject for the day's discussion, as selected by the supervisor.
2. Ask the mothers to come in and be seated; limit each session to twenty-five mothers. Look at each child present and send any child needing immediate treatment directly to the dispensary. Collect each attendance card in order to write the day's subject on it.
3. Welcome all of the mothers and encourage their interest and participation. Explain or ask one of the mothers to explain the reason for the demonstration. Show the food chosen for the demonstration and give the recipe to be prepared. Invite one of the mothers to prepare the food or assist in its preparation. Discuss the day's subject while the food is being prepared. Use audio-visual material if necessary.
4. Distribute the food to the children after its preparation and the discussion. Ask the mothers to taste the food and to feed it to their children. Encourage the mothers to give their opinions and

to ask questions. Ask questions on the most important points of the demonstration to be sure that the mothers understand the aim of the demonstration.

5. Encourage the mothers to make the recipe at home.
6. Return the cards to the mothers, collect the cups and spoons, thank the mothers for their assistance, show the mothers where to go next, and be sure to say goodbye.
7. If a mother asks for more information, provide it immediately after the rest of the mothers leave.
8. Wash the cups, spoons and other material used.

TASK No. 2

UNDER-FIVE - Level II

RESUME: COLLECT BACKGROUND INFORMATION ON THE CHILD AND HIS FAMILY; THIS TASK IS PERFORMED AT THE CHILD'S FIRST VISIT AND IS FOLLOWED BY TASKS Nos. 3, 4 AND POSSIBLY No. 8.

ENVIRONMENT: A quiet place and an amicable approach.

EQUIPMENT: "Road to Health" chart, pen or pencil, table and chairs.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision.

STEPS IN PERFORMING THIS TASK:

1. Check to see that the location is clean and that new charts are available.
2. Welcome the mother and ask her to be seated.
3. Ask to see her child's chart or prepare one if she does not have one.
4. Explain to the mother why information on the health of the child and his family is necessary.
5. Record the name of the child, of his mother, of his father and his father's occupation, the child's date of birth and weight at birth, whether the mother had difficulties during her pregnancy or during the delivery, how many children are living and how many have died, with the cause of death.
6. Ask if there are any serious illnesses in the family (Sickle Cell Anemia, TB, Leprosy, handicapped persons).

TASK No. 2

UNDER FIVE - Level II

7. Ask if the child has been seriously ill and/or hospitalized.
8. Record all the information on the child's chart. Continue with the next task or thank the mother for her help, return the chart and explain where she is to go next.
9. When the mother leaves, be sure to say goodbye.

TASK No. 3

UNDER-FIVE - Level I

RESUME: WEIGH A CHILD AND NOTE THE WEIGHT ON THE WEIGHT CHART.

ENVIRONMENT: Adequate light to read the weight on the scale.

EQUIPMENT: Child and adult weight scales, "Road to Health" chart, table, chair, stool convenient for undressing the child, cleaning-up material, pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision.

STEPS IN PERFORMING THIS TASK:

1. Check the scale. Adjust it if necessary. If there are difficulties, ask the supervisor for assistance.
2. Greet the mother and ask her to be seated. Ask for her child's weight chart and ask her to undress her child.
3. Ask her to put her child on the scale and to take the child off the scale after the weight has been taken. Write down the weight on the chart.
4. If it is difficult to weigh the child by himself, ask the mother to hold him and weigh the two together. After writing down the combined weight, weigh the mother by herself and write down the weight. Then subtract the mother's weight from the mother and child's combined weight, and write this final calculation on the child's chart.
5. Give the chart back to the mother and tell her her child's weight. Show her where she is to go next and be sure to say goodbye.
6. Clean the scale(s) and other furniture, if necessary, before weighing the next child.

TASK No. 4

UNDER-FIVE - Level II

RESUME: ASSESS THE CHILD'S STATE OF HEALTH, INCLUDING WHETHER HE IS "AT RISK" OR NOT. THIS TASK IS PERFORMED DURING A CHILD'S FIRST VISIT, FOLLOWING TASKS Nos. 2 AND 3. IT WILL BE FOLLOWED BY TASKS Nos. 5, 6 OR 8.

ENVIRONMENT: A quiet place and an amicable approach.

EQUIPMENT: Infant weighing scale, regular scales, stethoscope, "Road to Health" charts, booklets, table, chairs, stools, pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under periodic supervision, having the latitude to decide if the child is well or sick and whether he should be assigned to the "at-risk" category.

STEPS IN PERFORMING THIS TASK:

1. Greet the mother, ask her to be seated and put her at ease.
2. Ask for her child's "Road to Health" chart and records. Check that all information has been recorded; weight, history and observations.
3. If the child has had any past illnesses, obtain more information.
4. Ask if the child has any present health problems and ask for more details.
5. Ask the mother to undress the child; do a physical examination.
6. Decide if the child is well or sick and/or if he should be assigned to the "at-risk" category.

TASK No. 4

UNDER-FIVE - Level II

7. Explain to the mother what has been decided and write down the information on the child's record. Inform her also about other Center services.
8. Tell the mother what has to be done next and where to go next, or continue with the next task.
9. If the appointment is finished, be sure to say goodbye.

TASK No. 5

UNDER-FIVE - Level II

RESUME: PROVIDE REGULAR SURVEILLANCE AND MAINTENANCE OF CHILD HEALTH. THIS TASK MAY FOLLOW TASK No. 4. IT MAY BE FOLLOWED BY TASK No. 7 OR 8.

ENVIRONMENT: A quiet place and an amicable approach.

EQUIPMENT: Child and adult weight scales, "Road to Health" chart, a table, chair and stools convenient for undressing the child, preventive medication (according to Medical Directives) and a pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision and has the latitude to decide to stop the task if the child is ill.

STEPS IN PERFORMING THIS TASK:

1. Greet the mother and ask her to be seated. Ask for her record and the "Road to Health" chart.
2. Weigh or have the child weighed. Note down the weight and write it on the weight chart.
3. Ask about the child's health since the last visit.
4. Ask her to undress her child. Observe and examine the child.
5. Determine if the child is sick and, if so, stop this task and continue with the diagnosis and treatment task (No. 8).
6. If the child is in good health and is satisfactorily gaining weight, write this fact in the record.

7. If the child appears to fall into the "at-risk" category, mark this fact in the record and bring the reason for this special care to the mother's attention.
8. Examine the child's file and determine from it and from the mother if there is need for immunizations or other preventive medicine.
9. Explain the purpose of the immunization and/or preventive medicine, and advise the mother to have her child protected if there is a need.
10. Give preventive medicine or have it given.
11. Advise the mother on care appropriate for the age and health status of her child. Discuss weight gain with the mother and point out her child's weight on the chart. Discuss psychomotor development and general health status. Ask her if she has any questions. Inform her also about other Center services.
12. Set the next appointment, mark it in the record booklet and repeat the date to the mother. Show her where she is to go next or continue with the next task.
13. When the mother leaves, be sure to say goodbye.

TASK No. 6

UNDER FIVE - Level II

RESUME: FOLLOW THE CHILD IN THE "AT-RISK" CATEGORY AND PROVIDE SPECIAL GUIDANCE. DETERMINE IF THERE IS A NEED FOR A HOME VISIT. THIS TASK FOLLOWS TASKS Nos. 4 AND 5.

ENVIRONMENT: An understanding approach in a quiet place.

EQUIPMENT: Weight chart, chart marked "at risk", scale for children and infants, tape measure, stethoscope, medication indicated by Directives, bottles and wrapping paper for taking medication home, visual aids for providing nutritional guidance, table, chairs and stools for undressing a child.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision and has the latitude to decide which procedures to follow; in particular, whether to continue to treat the child as an "at-risk" patient and whether or not to arrange a home visit.

STEPS IN PERFORMING THIS TASK:

1. Greet the mother, ask her to be seated and ask for her child's weight chart. Consult the child's health records to determine the reasons for him being in the "at-risk" category.
2. Ask the mother to undress her child and observe the child's general state of health. Weigh him or have him weighed. Write down the child's weight on his chart or have it written down.
3. Ask the mother how the child has been; if there have been some problems since the last visit, if the mother had been able to follow advice given, and if not, why not.
4. Review special care progress, complaints and general state of health of the child. Do a physical examination if necessary. Note on the child's record any information.

5. Give advice and medication necessary. Record it.
6. Decide if it is necessary to obtain more information on the child's home condition and if the mother can be encouraged to follow the advice given when she returns home. Suggest a home visit and, if the mother agrees, make an appointment both for the home visit as well as for the next visit to the Center.
7. Discuss the child's progress with the mother. Make certain that she understands what one must do for an "at-risk" child. Inform her of other Center services. Repeat if necessary.
8. If the child's progress is satisfactory, congratulate the mother, decide if the child should remain in the "at-risk" category and, if not, continue with the check-up as one would for a child in good health. Remind her of the appointment(s). Show her where she is to go next and be sure to say goodbye.

TASK No. 7

UNDER-FIVE - Level II

RESUME: VACCINATE A CHILD AND RECORD IT.

ENVIRONMENT: Clean conditions, sterile instruments, and a smile are essential.

EQUIPMENT: Vaccine and a means to preserve the vaccine, containers with sterile needles, syringes and forceps, basin with gauze, notebooks, pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision and has the latitude to decide which vaccinations to give based on age, vaccination history, and absence or presence of illness.

STEPS IN PERFORMING THIS TASK:

1. Check all the vaccine; make sure that it can be used and that it has not expired. Read the instructions on how to administer it.
2. Greet the mother and invite her to be seated. Ask for her child's records. See which vaccinations have been prescribed and check if others can be given at the same time. Check that there are no contra-indications by consulting the Directives.
3. If there is a contra-indication, make another appointment and write the date in the record. Explain to the mother why the child cannot be vaccinated.
4. If the vaccination can be given, explain why the vaccination is being given, what reactions can be expected and what to do in case of need.
5. Prepare the vaccine and give the vaccination. Be sure that the mother understands what to do to avoid an infection and in case of

TASK No. 7

UNDER-FIVE - Level II

a reaction. Check to see that the next appointment to "read the take" or to give another vaccination is written in the record. Remind the mother of this appointment.

6. Note the vaccination given on the record and show it to the mother, return the record before saying goodbye.
7. Clean the materials used and complete the vaccination register or have it done. This must be done before seeing the next child.

TASK No. 8

UNDER-FIVE - Level II

RESUME: DIAGNOSE, TREAT OR REFER A SICK CHILD. THIS TASK
FOLLOWS TASKS Nos. 4 AND 5.

ENVIRONMENT: A quiet place and an understanding approach.

EQUIPMENT: Child and adult scales, "Road to Health" chart, records,
stethoscope, curative medication, wrapping paper for
taking medicine home, medication bottles, tables, stools,
pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision and has the latitude to decide whether to treat a child according to the Directives or to send the child for a more extensive consultation.

STEPS IN PERFORMING THIS TASK:

1. Greet the mother and ask her to be seated. Ask to see her child's "Road to Health" chart and the record.
2. Observe the child and find out from the mother what complaints her child has and why she is worried about his health. Review past history.
3. Ask her to undress her child and weigh the child or have him weighed. Write his weight on the "Road to Health" chart.
4. Check the complaints; do a physical examination.
5. Write the findings down and decide, according to the Directives, if it is possible to treat the child here. If the child should be sent for an extensive consultation, refer him.
6. If it is decided to treat the child here, check the Directives to make certain which treatment to give.

7. Explain to the mother what has been found, the treatment which will be given and how it will be given. Make certain that the mother understands.
8. Administer the medication; wrap the medicine to be taken home.
9. Write down all information in the record. Ask the mother if she has any questions.
10. Advise the mother on care for the child at home.
11. Make an appointment to check the child's progress. Show the mother where to go next or continue with the next task.
12. If the appointment is finished, return the child's record to the mother and say goodbye.

TASK No. 9

UNDER-FIVE - Level I

RESUME: GIVE OUT ORAL OR TOPICAL DRUGS ACCORDING TO INSTRUCTIONS. EXPLAIN IN A SIMPLE WAY ITS PURPOSE AND USE.

ENVIRONMENT: A clean place and an amicable approach.

EQUIPMENT: Preventive and curative medication, according to Directives; cup, water, teaspoon, wrapping paper, medication bottles, pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under continuous direct supervision.

STEPS IN PERFORMING THIS TASK:

1. Check to see that all the equipment is ready and that the working area is clean.
2. Greet the mother, ask her to be seated and put her at ease. Ask to see her record.
3. Read the instructions for medication and check to see that it is available. If it is not, inform the supervisor. Prepare the medication while explaining to the mother its purpose, use and how it is administered.
4. Put the child at ease, near his mother, and give the medication.
5. If the child vomits, inform the supervisor and ask for instructions.
6. Wrap or bottle the medicine to be taken home. Explain the dosage and administration to the mother. Ask the mother to repeat this information.

TASK No. 9

UNDER-FIVE - Level I

7. Check that all the medication has been given and record it.
8. Show the mother where to go and say goodbye.

TASK No. 10

UNDER-FIVE - Level II

RESUME: HOME VISIT TO AN "AT-RISK" CHILD, TO REINFORCE GUIDANCE, TO OBSERVE CONDITIONS AT THE HOME, AND TO EVALUATE REASONS IF CHILD IS NOT MAKING SATISFACTORY PROGRESS.

ENVIRONMENT: A respectful approach is important at the home.

EQUIPMENT: Area map to find the house; "at-risk" file pertaining to the child.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision and has the latitude to make decisions, in particular to choose the subject for discussion and/or demonstration according to the conditions found at the home.

STEPS IN PERFORMING THIS TASK:

1. Make a schedule for home visits and become familiar with the record of each child to be visited.
2. Go to the home, greet the mother and put her at ease. If she is not at home, consider obtaining information from neighbors or other family members.
3. If it is judged inappropriate to continue with the visit, make another appointment or ask the mother to come to the Center, say goodbye and leave.
4. If the visit can be held, explain its reasons. Ask to see the child's "Road to Health" chart; note the visit on the chart; check if the mother has missed an appointment and, if so, why.
5. Ask if there are special problems at home and if the child has had problems since his last visit to the Center; discuss the child's health.

6. If the father is at home, encourage him to take part in the conversation.
7. Observe conditions in and outside the house.
8. Ask questions about the other children and examine them if necessary. Refer them for care if it called for.
9. Decide what advice is best for the situation found.
10. Determine whether a discussion or demonstration is called for and ask the mother to invite neighbors to participate. Explain the Center and invite them to make use of its services.
11. Thank the participants for their attention and hospitality, and say goodbye.
12. Write down the findings and continue with other visits.
13. After finishing the scheduled visits, return to the Center to discuss the visits.

TASK No. 11

UNDER-FIVE - Level I

RESUME: VISIT NEIGHBORHOOD FAMILIES TO EXPLAIN CENTER SERVICES AND PROMOTE THEIR USE.

ENVIRONMENT: Any place outside the Center. An amicable approach is important.

EQUIPMENT: Visual aids, if available.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision.

STEPS IN PERFORMING THIS TASK:

1. Greet the people.
2. Ask permission to enter.
3. Explain the purpose of the visit.
4. If they show interest, continue. If not, say goodbye and leave.
5. Try to initiate a discussion. Explain, using available visual aids, the services offered in the under-fives, the prenatal, and the family planning clinics and emphasize their importance.
6. Summarize the important points and encourage questions.
7. Thank the audience and invite them to visit the Center. Say goodbye.

TASK No. 12

UNDER-FIVE, PRENATAL - Level I

RESUME: DO SIMPLE LABORATORY TESTS ACCORDING TO "DIRECTIVES".

ENVIRONMENT: Privacy and clean conditions for obtaining samples, and an amicable approach.

EQUIPMENT: Laboratory instruments and materials, depending on which tests are specified by the Directives; cotton-wool, disinfectant, sterile needles and syringes, bottles, table, pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision.

STEPS IN PERFORMING THIS TASK:

1. Greet the person and put her at ease. Ask for her record.
2. Read the instructions and make the preparations for taking the sample.
3. Explain what is going to be done.
4. Take the sample.
5. Do the test according to the Directives.
6. Write the results in the book and on the record.
7. Thank the person and tell her where to go next. Say goodbye.
8. Before seeing the next person, make certain that all of the instruments are ready.

RESUME: COLLECT INFORMATION ON THE WOMAN'S HEALTH, FORMER PREGNANCIES, THE PRESENT PREGNANCY, AND THE HEALTH OF THE FAMILY. THIS TASK IS PERFORMED AT THE FIRST VISIT TO THE PRENATAL CONSULTATION AND IS FOLLOWED BY TASKS Nos. 17 AND 18, AND MAY BE FOLLOWED BY TASK No. 20.

ENVIRONMENT: An amicable approach and a quiet place.

EQUIPMENT: Table, chairs, prenatal record, pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision.

STEPS IN PERFORMING THIS TASK:

1. Check to see that the working area is clean and that the records are ready.
2. Greet the woman, ask her to be seated and put her at ease.
3. Ask to see her prenatal record or prepare one if she does not have one.
4. Explain to the woman why information on her health, the health of her family, the progress of former pregnancies and births, and the actual pregnancy is needed.
5. Find out her name, her age (if she does not know her exact age, try to fix it within five-year groups), her address, her husband's name, and his and her occupations.
6. Concerning her previous and present pregnancies, collect the following information:

(6. continued)

- a. the number of pregnancies:
 - miscarriages
 - births; normal and abnormal
 - b. the number of children:
 - living
 - dead (with cause)
 - c. difficulties during pregnancy
 - d. date of last period.
7. Ask her about her present state of health and the health of her family, and ask if there are any illnesses in the family in order to determine if there might be something which could influence the development of the fetus or cause problems during or after delivery.
 8. Write all of the collected information in the prenatal record.
 9. Thank the woman for her cooperation, return her record, and show her where to go next or continue with the next task. If the appointment is finished, be sure to say goodbye.

TASK No. 14

PRENATAL - Level I

RESUME: GIVE A SIMPLE HEALTH TALK RELATING TO PREGNANCY.

ENVIRONMENT: A place where a group can gather and an amicable approach.

EQUIPMENT: Visual aids, benches.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision.

STEPS IN PERFORMING THIS TASK:

1. Review the subject selected by the supervisor. Prepare visual aids.
2. Greet the women and ask them to be seated.
3. Give the talk and encourage participation. Use visual aids.
4. Ask if there are questions. Explain procedures in the prenatal clinic. Inform them about other Center services.
5. Thank the audience. Show them where to go next.

TASK No. 15

PRENATAL - Level I

RESUME: WEIGH A WOMAN, MEASURE HER HEIGHT AND RECORD IT.

ENVIRONMENT: Adequate light to read measurements and an amicable approach.

EQUIPMENT: Scale, tape measure or stick, prenatal record, pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision.

STEPS IN PERFORMING THIS TASK:

1. Check and regulate the scale.
2. Greet the woman and ask for her prenatal record. Let her take off her shoes and heavy clothing. Show her how to stand on the scale.
3. Note the weight and write it in the record.
4. Take the height and record.
5. Return her record, tell her where to go next or continue with the next task. If the appointment is finished, be sure to say goodbye.

TASK No. 16

PRENATAL - Level I

RESUME: TAKE THE BLOOD PRESSURE AND RECORD IT.

ENVIRONMENT: A quiet place where one can use a stethoscope and an amicable approach.

EQUIPMENT: Sphygmomanometer, stethoscope, chairs, table, prenatal record.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision.

STEPS IN PERFORMING THIS TASK:

1. Check that the sphygmomanometer, stethoscope are in working order and that the working area is clean and ready for use.
2. Greet the woman. Ask her to be seated and put her at ease.
3. Explain what you are going to do.
4. Take the blood pressure.
5. Take the pressure one more time to check the findings. If there are any doubts, consult the supervisor. Record the blood pressure on the prenatal record.
6. Return the record and tell her where to go next or continue with the next task. If the appointment is finished, be sure to say goodbye.

TASK No. 17

PRENATAL - Level II

RESUME: MEASURE THE HEIGHT OF THE FUNDUS, LISTEN TO THE FETAL HEARTBEAT AND RECORD. THIS TASK MAY FOLLOW TASKS Nos. 15, 16 AND IS FOLLOWED BY TASK No. 18 OR 19.

ENVIRONMENT: A quiet place with privacy and an amicable approach.

EQUIPMENT: Tape measure, fetal stethoscope, examining table, pen or pencil, prenatal record.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision.

STEPS IN PERFORMING THIS TASK:

1. Greet the woman, put her at ease. Ask to see her prenatal record.
2. Explain what is going to be done. Ask her to lie down on the examining table on her back.
3. Measure the height of the fundus according to specific instructions and record the findings on the record.
4. After the fifth month, listen for the presence of the fetal heart-beat. If there are any doubts, consult the supervisor. Write down the information on the record.
5. Inform the woman of the findings and reassure her; help her to get up and dress herself, if necessary. Hand back her record and tell her where to go next or continue with the next task. If the appointment is finished, be sure to say goodbye.

RESUME: CONFIRM THE PREGNANCY AND CHECK WHETHER THE WOMAN IS "HIGH-RISK". THIS TASK IS PERFORMED AT THE FIRST VISIT, AFTER TASKS Nos. 14, 15, 16, 17 AND MAY BE FOLLOWED BY TASK No. 20.

ENVIRONMENT: A quiet place with privacy and an amicable approach.

EQUIPMENT: Examining table, stethoscope, sphygmomanometer, tape measure, fetal stethoscope, prenatal record, table, chairs, pen or pencil, scale, equipment for samples of hemoglobin and urinalysis.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision and has the latitude to decide if the woman is pregnant and if the pregnancy is "high-risk".

STEPS IN PERFORMING THIS TASK:

1. Greet the woman, ask her to be seated and put her at ease.
2. Ask for her prenatal record. Check to see that all necessary information has been entered on the record.
3. If there is any doubt, check the facts.
4. Do a physical examination.
5. Decide whether the woman is pregnant.
6. Decide, according to the Directives, if the woman should be sent to a "high-risk" consultation. If so, make an appointment. Explain what has been decided and the importance of the "high-risk" clinic.

7. According to the Directives, prescribe preventive or curative medication. Make sure the woman understands how to take the medication.
8. Give advice on health maintenance, nutrition and hygiene.
9. Record the findings, the advice given, and what has been prescribed.
10. Explain the purpose and importance of regular prenatal check-ups. Encourage questions and make sure she understands.
11. Make an appointment for the next visit and return the record to her. Tell her where to go next or continue with the next task.
12. If the appointment is finished, be sure to say goodbye.

TASK No. 19

PRENATAL - Level II

RESUME: CHECK-UP OF A PREGNANT WOMAN TO ASSURE THAT GENERAL HEALTH AND PREGNANCY ARE NORMAL. IN CASE OF A PROBLEM, TAKE ACTION ACCORDING TO THE "DIRECTIVES". THIS TASK MAY FOLLOW TASKS Nos. 14, 15, 17 AND MAY BE FOLLOWED BY TASK No. 20.

ENVIRONMENT: A quiet place with privacy and an amicable approach.

EQUIPMENT: Scale, sphygmomanometer, stethoscope, tape measure, fetal stethoscope, examining table, prenatal record, table, chairs, pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under periodic direct supervision and has the latitude to decide if the development of the pregnancy is normal or which Directives to follow for management of problems.

STEPS PERFORMED IN THIS TASK:

1. Greet the mother, ask her to be seated and put her at ease.
2. Review all information in the record and ask her if she has any complaints or problems. Add findings to the record.
3. Take weight and blood pressure (or have it done). Note on the record.
4. Ask the woman to lie on her back and measure the height of the fundus and listen to the fetal heartbeat. Ask her to get up and help her.

5. If the pregnancy is normal, provide preventive medication according to the Directives and explain to the mother how to take it. Make sure she understands.
6. Consult the Directives in case of problems and take action.
7. Explain action to the woman. Emphasize "high-risk" indication. Make sure she understands.
8. Advise on hygiene and nutrition, and if she is near the end of the pregnancy, explain how to prepare for delivery. Make sure she understands.
9. Make an appointment for the next visit and record all information on the prenatal record. Make sure once more that she understands how and when to take her medication.
10. Return her record. Tell her where to go next and if the appointment is finished, be sure to say goodbye.

RESUME: ASSIST AT A "HIGH-RISK" CONSULTATION. PREPARE INFORMATION ON PATIENTS FOR CONSULTANT PHYSICIAN AND CARRY OUT CONSULTANT'S INSTRUCTIONS. THIS TASK FOLLOWS TASKS Nos. 18, 19.

ENVIRONMENT: A quiet place with privacy and an amicable approach.

EQUIPMENT: Sphygmomanometer, stethoscope, fetal stethoscope, examining table, sterile gloves, soap and water, disinfectant, prenatal record, register, table, chairs, pen or pencil.

EXTENT OF RESPONSIBILITY:

Works under continuous direct supervision.

STEPS IN PERFORMING THIS TASK:

1. Check all medical equipment necessary for use by the consultant. Greet the women, collect their prenatal records, and be sure they are ready.
2. Give the consultant the record and an oral report on the woman's condition. Introduce the patient to the consultant, put her at ease, explain what is going to be done.
3. Ask her to undress and to lie on her back on the examining table. Help her if necessary.
4. Give the needed equipment to the consultant and assist him during the consultation as requested.
5. Carry out his instructions (laboratory tests, medication or referral). Help her to get up. Explain to the woman the findings.

6. Record all instructions. Explain the results of the consultation and what she should do. Be sure that she understands and repeat one more time, if necessary. Advise on hygiene and nutrition, reinforce consultant's instructions.
7. Make an appointment for the next visit. Make sure that she understands and repeat one more time, if necessary. Return her record. Tell her where to go next. Be sure to say goodbye.

SECTION 2

Curriculum Objectives and Content

In the previous Section, task analyses were discussed to clarify, for curriculum developers, teachers and trainees, specific work requirements. To elaborate the training program, supervising health workers and teachers together determine what knowledge, skills and attitudes are required (task requirement lists) and how to arrange these requirements by subjects. For each subject, extent and depth are decided upon by closely scrutinizing, one by one, task steps; thus, it is possible to arrive at "CURRICULUM OBJECTIVES". "Attitudinal Curriculum Objectives" refer to the desired behavior of trainees in the performance of the tasks.

An important result of linking task description to curriculum objectives is the ability to eliminate non-essential knowledge and skills from the program and to focus training on effective performance.

Since tasks, as has been noted, were divided into two levels by complexity, the curriculum objectives are accordingly listed separately by levels.

For example, task No. 14 - "Give a simple health talk relating to pregnancy" (Level I) and for task No. 8 - "Diagnose, treat or refer a sick child" (Level II), the following requirements were established for each step.

Task No. 14

Requirements

Step 1. Check the scale and regulate it.

Skill: checking, regulating an adult scale.

- | | | |
|---------|--|--|
| Step 2. | Greet the woman and ask to see her prenatal record. Ask her to take off her shoes and heavy clothing. Help her if necessary. | Skill: communication, using a prenatal record.
Attitude: being helpful. |
| Step 3. | Ask her to stand on the scale. Note weight and write it in the record. | Skill: using a weighing scale, using a prenatal record. |
| Step 4. | Note the height and write it in the record. | Skill: measuring height with stick or tape, using a prenatal record. |
| Step 5. | Ask her to get dressed, help if necessary. Return her record, tell her where to go or continue with the next task. | Attitude: being helpful.
Knowledge: sequence of procedures in the clinic. |
| Step 6. | If appointment is finished, be sure to say good-bye. | Skill: communication.
Attitude: being helpful.
Knowledge: why helpful attitude may help to promote acceptance of MCH services. |

Task No. 8

Requirements

- | | | |
|---------|--|---|
| Step 1. | Greet the mother and ask her to be seated. Ask to see the child's RTH card and the record. | Skill: communication, using records.
Attitude: friendly, personal.
Knowledge: MCH goals and procedures. |
| Step 2. | Observe the child and find out what complaints her child has and why she is worried about his health. Review past history. | Skill: observation, history-taking, communication.
Attitude: empathy.
Knowledge: symptoms, signs, course of most common childhood illnesses and injuries. |
| Step 3. | Ask mother to undress the child and weigh the child or have it weighed. Write his weight on the RTH chart. | Skill: weighing a child, using RTH chart. |
| Step 4. | Check the complaints. Do a physical examination. | Skill: interviewing, observation, physical examination.
Knowledge: symptoms and signs, course of most common childhood diseases and injuries. |
- Etc.

It is apparent that there will be considerable overlapping of knowledge, skill and attitudinal requirements for different tasks. For a practical teaching approach, some grouping of requirements is necessary.

Many approaches can be used in organizing the knowledge, skill and attitudinal requirements for the curriculum. We have chosen conventional subject headings which reflect operational components of the Centers as rubrics for the requirement organization. Thus, in our illustration the following subject headings are used:

- MCH (principles)
- Nutrition
- Hygiene
- Child Development
- Pregnancy
- Drugs
- Immunization
- Communication
- Practical Skills

The composite list of requirements ordered by subjects is the basis for the curriculum objectives. Curriculum objectives for both Level I and Level II are given by these subject headings, for a curriculum to prepare personnel for the tasks of the "under-five" and prenatal clinics. The Level II curriculum objectives do not include skills for nurses, since the curriculum was designed for staff with previous nursing training who presumably already possessed these skills. An expanded curriculum covering these objectives could, of course, be developed.

The relation of the different tasks to the subject categories is noted in the two tables which follow.

RELATION OF TASKS TO SUBJECTS - LEVEL I

SUBJECTS	TASKS								
	NUTRITION DEMONSTRATION (1)	WEIGHING A CHILD (3)	GIVING DRUGS (9)	HOME VISIT (11)	DOING LAB TESTS (12)	WEIGHING AND MEASURING (15)	TAKING BLOOD PRESSURE (16)	GIVE A SIMPLE HEALTH TALK (14)	
M.C.H.	X	X	X	X	X	X	X	X	
NUTRITION	X	X	-	X	-	X	-	X	
HYGIENE	X	X	X	X	X	X	X	X	
COMMUNICATION	X	X	X	X	X	X	X	X	
PRACTICAL SKILLS	X	X	X	-	X	X	X	X	

By consulting these tables and the curriculum objectives organized by subjects, the necessary content of a curriculum to prepare personnel for the task performance becomes evident.

The tables also suggest how integration of the subjects can be approached. Various subjects have to be taught for the performance of a task and the same subject content is needed for different tasks. Thus, despite the concentration on task-specific teaching, this approach does not exclude a degree of polyvalency of the trainees after the course.

CURRICULUM OBJECTIVES - LEVEL I

Attitudinal Curriculum Objectives

After completion of the course, the health worker will be able to:

- Participate in giving integrated preventive and curative care.
- Approach parents and children with understanding of their needs for sympathy, dignity, information and reassurance.
- Work in a team.

SUBJECT: Maternal and Child Health

Knowledge and practical application of this subject are needed for tasks Nos. 1, 3, 11, 14.

After completion of the course, the health worker will be able to:

- Explain what Maternal and Child Health care means, its importance, and what an MCH clinic offers: pre-natal, maternity, family planning, and "under-fives" clinics.
 - Explain how the program operates.
 - Carry out technical directives.
-

SUBJECT: Nutrition

Knowledge and practical application of this subject are needed for tasks Nos. 1, 3, 11, 14.

After completion of the course, the health worker will be able to:

- Explain child feeding needs at different ages and the importance of proper nutrition.
- Explain "multimix" meals and encourage mothers to use them.
- Demonstrate preparation of a meal for a healthy, sick or malnourished child.
- Explain what "malnutrition" means, how to prevent it, and what to do when it exists.

LEVEL 1

CURRICULUM OBJECTIVES

"UNDER-FIVES"

SUBJECT: Hygiene

Knowledge and practical application of this subject are needed for tasks Nos. 1, 3, 9, 11, 12.

After completion of the course, the health worker will be able to:

- Explain the role of personal and environmental hygiene in relation to health.
 - Apply hygiene at work, particularly in the use of equipment.
-

SUBJECT: Communication

Knowledge and practical application of this subject are needed for tasks Nos. 1, 3, 9, 11, 12.

After completion of the course, the health worker will be able to:

- Demonstrate ability to communicate with a group (i.e., optimal size, visual aids, attitude).
- Lead a discussion and encourage participation on selected subjects, such as:
 - what the Center offers
 - the "Road to Health" chart
 - nutrition
 - hygiene
- Explain selected health topics to individuals.
- Communicate effectively with clients.

SUBJECT: Skills for Aides

Knowledge and practical application of this subject are needed for tasks Nos. 1, 3, 9, 11, 12.

After completion of the course, the health worker will be able to:

- Give a cooking demonstration.
- Weigh a child; check, regulate and use a scale.
- Record weight on "Road to Health" chart and explain in a simple way the weight curve.
- Read a prescription; administer oral and topical drugs.
- Make a home visit to promote Center services.
- Recognize a seriously ill child.
- Clean working area and equipment.
- Do a simple laboratory test.

SUBJECT: Maternal and Child Health

Knowledge and practical application of this subject are needed for tasks Nos. 14, 15, 16.

After completion of the course, the health worker will be able to:

- Explain what Maternal and Child Health care means, its importance, and what an MCH clinic offers: prenatal, maternity, family planning and "under-fives" clinics.
 - Explain how the program operates.
 - Carry out technical directives.
-

SUBJECT: Nutrition

Knowledge and practical application of this subject are needed for tasks Nos. 14, 15, 16.

After completion of the course, the health worker will be able to:

- Explain the importance of nutritious food for pregnant women.
- Explain which foods are good for health during pregnancy.
- Explain common complaints concerning food during pregnancy (i.e., nausea and vomiting) and what to do for them.

SUBJECT: Hygiene

Knowledge and practical application of this subject are needed for tasks Nos. 14, 15, 16.

After completion of the course, the health worker will be able to:

- Explain the role of personal and environmental hygiene in relation to health and pregnancy.
 - Apply hygiene at work, particularly in the use of equipment.
-

SUBJECT: Communication

Knowledge and practical application of this subject are needed for tasks Nos. 14, 15, 16.

After completion of the course, the health worker will be able to:

- Demonstrate ability to communicate with a group (i.e., optimal size, visual aids, attitude).
- Lead a discussion and encourage participation on selected subjects, such as:
 - what the Center offers
 - the "Road to Health" chart
 - nutrition
 - hygiene
- Communicate effectively with pregnant women.

SUBJECT: Practical Skills

Knowledge and practical application of this subject are needed for tasks Nos. 12, 14, 15, 16.

After completion of the course, the health worker will be able to:

- Take height, weight and blood pressure of an adult.
- Check, regulate and use a scale.
- Record findings.
- Clean working area and equipment.
- Explain the steps in care given during a visit.
- Do a simple laboratory test.

CURRICULUM OBJECTIVES - LEVEL II

Attitudinal Curriculum Objectives

After completion of the course, the health worker will be able to:

- Participate in giving integrated preventive and curative care.
- Approach parents and children with understanding of their needs for sympathy, dignity, information and reassurance.
- Work in a team.

SUBJECT: Maternal and Child Health

Knowledge and practical application of this subject are needed for tasks Nos. 2, 4, 5, 6, 7, 8, 10.

After completion of the course, the health worker will be able to:

- Explain what Maternal and Child Health Care means, why it is important, and what an MCH clinic offers: prenatal, maternity, family planning and "under-fives" clinics.
 - Explain the difference between a dispensary, a hospital and an MCH clinic.
 - Promote attendance at MCH clinics.
 - Explain purpose and application of "Road to Health" chart.
-

SUBJECT: Nutrition

Knowledge and practical application of this subject are needed for tasks Nos. 4, 5, 6, 8, 10.

After completion of the course, the health worker will be able to:

- Use the "Road to Health" chart, explain the importance of nutrition for normal growth; make explanations understandable to the mother.
- Recognize and explain signs and effects of malnutrition; make explanations understandable to the mother.
- Explain how to prepare nutritious meals for well, sick or malnourished children.
- Explain and discuss with mothers how best to use limited resources in improving family meals.

SUBJECT: Child Development

Knowledge and practical application of this subject are needed for tasks Nos. 2, 4, 5, 6, 8, 10.

After completion of the course, the health worker will be able to:

- Identify different stages of development; recognize deviation from the normal.
 - a. physical development
 - b. psychomotor development
 - c. emotional and social development
 - Identify factors that influence normal development, before and after birth (ie., nutrition, diseases and child spacing).
 - Interpret the rate of growth of a child with the aid of the "Road to Health" chart.
 - Identify children "at risk".
-

SUBJECT: Immunization

Knowledge and practical application of this subject are needed for tasks Nos. 4, 5, 6, 7.

After completion of the course, the health worker will be able to:

- Explain immunizations and their schedule.
- Explain precautions and contra-indications, preservation and reactions of each vaccine.
- Identify children requiring immunization.
- Administer vaccines.

SUBJECT: Drugs

Knowledge and practical application of this subject are needed for tasks Nos. 4, 5, 6, 7, 8, 10.

After completion of the course, the health worker will be able to:

- Explain, with regard to preventive and curative drugs:
 - a. How they work
 - b. How, how much and how long to give them
 - c. When to give them (indication, contra-indication, precautions)
 - d. What to do in case of adverse reaction.
-

SUBJECT: Hygiene

Knowledge and practical application of this subject are needed for tasks Nos. 2, 4, 5, 6, 7, 8, 10.

After completion of the course, the health worker will be able to:

- Explain the role of hygiene in maintaining health.
- Apply hygiene at work.
- Explain the purpose of cleaning and sterilization.
- Advise on personal and environmental hygiene for the child.

SUBJECT: Communication

Knowledge and practical application of this subject are needed for tasks Nos. 2, 4, 5, 6, 7, 8, 10.

After completion of the course, the health worker will be able to:

- Explain the aim of health education.
- Prepare a health education program adjusted to local circumstances.
- Use effective communication methods with groups or individuals.
- Prepare and use simple teaching aids.
- Give health education to individuals and groups.

SUBJECT: Maternal and Child Health

Knowledge and practical application of this subject are needed for tasks Nos. 13, 17, 18, 19, 20.

After completion of the course, the health worker will be able to:

- Explain what Maternal and Child Health Care means, why it is important, and what an MCH clinic offers: prenatal, maternity, family planning and "under-fives" clinics.
 - Explain the difference between a dispensary, a hospital and an MCH clinic.
 - Promote attendance at MCH clinics.
 - Explain purpose and application of "Road to Health" chart.
-

SUBJECT: Nutrition

Knowledge and practical application of this subject are needed for tasks Nos. 18, 19, 20.

After completion of the course, the health worker will be able to:

- Use the "Road to Health" chart, explain the importance of nutrition for normal growth; make explanations understandable to the mother.
- Recognize and explain signs and effects of malnutrition; make explanations understandable to the mother.
- Explain how to prepare nutritious meals for well, sick or malnourished children.
- Explain and discuss with mothers how best to use limited resources in improving family meals.

SUBJECT: Pregnancy

Knowledge and practical application of this subject are needed for tasks Nos. 13, 17, 18, 19, 20.

After completion of the course, the health worker will be able to:

- Identify signs and symptoms in different stages of pregnancy.
 - Identify factors that influence the normal progress of pregnancy:
 - a. before conception
 - b. during pregnancy
 - Identify "high-risk" women.
 - Advise on spacing of pregnancies.
-

SUBJECT: Immunization

Knowledge and practical application of this subject are needed for task No. 19.

After completion of the course, the health worker will be able to:

- Explain immunizations and their schedule.
- Explain precautions and contra-indications, preservation and reactions of each vaccine.

SUBJECT: Drugs

Knowledge and practical application of this subject are needed for tasks Nos. 18, 19, 20.

After completion of the course, the health worker will be able to:

- Explain, with regard to preventive and curative drugs:
 - a. How they work
 - b. How, how much and how long to give them
 - c. When to give them (indication , contra-indication, precautions)
 - d. What to do in case of adverse reaction.
-

SUBJECT: Hygiene

Knowledge and practical application of this subject are needed for tasks Nos. 13, 17, 18, 19, 20.

After completion of the course, the health worker will be able to:

- Explain the role of hygiene in maintaining health.
- Explain hygiene of the pregnant woman and encourage its practice.
- Explain the purpose of cleaning and sterilization.

SUBJECT: Communication

Knowledge and practical application of this subject are needed for tasks Nos. 13, 17, 18, 19, 20.

After completion of the course, the health worker will be able to:

- Explain the aim of health education.
- Explain the principles of a health education program adjusted to local circumstances.
- Explain the use of effective communication methods for groups or individuals, including the use of teaching aids.

Curriculum Content Organization into Units

The curriculum objectives define broadly what the trainee needs to master and thus the content of the curriculum. Organization of this core content can then follow many paths. One approach which has been found useful is the use of units or modules. We have used such units, highlighting functional characteristics of the work in the MCH Centers.

We would like to emphasize that it is the need to continuously relate to the curriculum objectives within each unit rather than the unit divisions in themselves which distinguishes the approach of the suggested curriculum.

CURRICULUM UNITS

Level I

I. The Maternal and Child Health Center

- Aim, services, organization, role in the community, relation to other health units, i.e., dispensary, hospital.

II. Health Advising

Methods

- Effective communication techniques

Content

- Nutrition
- Hygiene
- Child Spacing
- Immunization
- Center Services
- Use of Prescribed Medication

III. Practical Skills for Aides

- Using the "Road to Health" Chart
- Weighing a child and an adult
- Measuring height
- Taking blood pressure
- Administration of oral medication
- Doing simple laboratory tests
- Cleaning techniques
- Giving advice and nutrition demonstrations

CURRICULUM UNITS

Level II

- I. THE MCH CENTER
 - Aim, services, organization, role in the community, relation to other health units, i.e., dispensary, maternity, hospital.

- II. THE PRENATAL CLINIC
 - Supervision of Normal Pregnancy

Regular surveillance and management of common complaints, preventive measures, advice on nutrition, hygiene and child spacing.

 - Supervision of High-Risk Pregnancies

Identification, management and referral patterns.

- III. THE "UNDER-FIVE" CLINIC
 - Supervision of Growth and Development

Regular surveillance and management of common health problems. Preventive measures, advice on nutrition, hygiene, and child spacing.

 - Supervision of the Child "At-Risk"

Identification, management and referral patterns.

 - Care of the Sick Child

Identification, management of common problems, and referral patterns.

- Supervision of Growth and Development in the Child
 - Surveillance, preventive measures.
 - Advice on nutrition, hygiene and child spacing.
 - Identification, management and referral patterns for the "at-risk" child.
 - Identification, management and referral patterns for the sick child.

IV. HEALTH ADVISING

- Methods
 - Effective communication techniques.
- Content
 - Nutrition
 - Hygiene
 - Child Spacing
 - Immunizations
 - Center Services
 - Use of Prescribed Medication
 - Other aspects of care of healthy, sick, and "at-risk" child.
 - Other aspects of care during normal and "high-risk" pregnancy.

SECTION 3

Lesson Program Organization

In the following pages, one will find an example of how curriculum content can be arranged within a time schedule. The resulting lesson program gives an overview of what will be taught. It is desirable for structuring a course and it can be helpful in outlining to students what to expect from the course.

The lesson program is arranged by:

1. SUBJECT - corresponding to the subjects of the curriculum.
2. TOPIC - detailing a subdivision of a subject.
3. PRACTICE - indicating the practical work to be performed by the trainees.
4. TIME - allocating how much time to spend on the topic; this is a function of the importance of the topic and the level of the trainees.
5. LESSON OBJECTIVE - summarizing what the trainee is expected to know at the end of each lesson; the lesson objectives relate to the curriculum objectives.

The examples given relate to the training program designed to prepare personnel for the "under-five" and prenatal clinics of the MCH Centers. They include a lesson program for a one-week Level I course and a lesson program for a two-week Level II course. The sequence of subjects in the daily program reflects the need to introduce variety into the daily teaching. Experience has shown that such variety is necessary to sustain trainee interest. Thus subject matter relevant to different units is introduced each day, rather than following a single unit from beginning to end. By the end of the course, however, the entire unit program will have been included.

LEVEL I - LESSON PLAN

Prenatal & "Under-Five" Clinics

SUBJECT	LESSON TOPIC	PRACTICE	TIME	LESSON OBJECTIVE
	Introduction to the course.		1 h	Provide general information about: objectives of the course.
MCH (Unit 1)	Maternal and Child Health Center		1 h	Explain the aim of the Center and the different services offered.
Nutrition (Unit 2)	Food		2 h	Explain the importance of nutrition and the value of different types of food.
Nutrition (Unit 2)	Food and pregnancy		1 h	Explain why a pregnant woman needs good food for herself and her baby.
Hygiene (Unit 2)	Hygiene and Health		1 h	Explain how cleanliness of the body and the environment can prevent diseases.
Communication (Unit 2)	What is communication?		2 h	Know the different communication methods.
Practical Skills (Unit 3)	Prenatal	Take: height; weight; blood pressure	2 h	Use a weighing scale; B.P. meter; and measuring stick.
Nutrition (Unit 2)	Child feeding		1 h	Describe appropriate foods for children from birth to five years.
Nutrition (Unit 2)	Food for a pregnant woman		1 h	Discuss appropriate food for the pregnant woman. Understand how to deal with local taboos.

LEVEL I - LESSON PLAN

Prenatal & "Under-Five" Clinics

SUBJECT	LESSON TOPIC	PRACTICE	TIME	LESSON OBJECTIVE
Hygiene (Unit 3)	Hygiene at work		1 h	Apply hygiene at work.
Communication (Unit 2)	Health education		2 h	Give a brief health education talk on nutrition or hygiene.
Practical Skills (Unit 3)	Under-Five clinic	Weigh a child and note weight on a chart	2 h	Use and understand the aim of the "road to health" chart.
Nutrition (Unit 2)	Pregnancy complaints		2 h	Recognize minor complaints of pregnant women related to food and offer appropriate advice.
Nutrition (Unit 2)	Weaning period		2 h	Understand the importance of proper weaning; offer appropriate advice on weaning.
Nutrition/Hygiene (Units 2 & 3)	Nutrition of the sick child		2 h	Advise about feeding and hydration of a sick child.
M.C.H. (Unit 1)	Family Planning		2 h	Understand and explain the aim of FP and relate it to Center activities.
Nutrition (Unit 2)	Malnutrition		2 h	Understand and explain "malnutrition" and recognize the signs.
Communication/ Nutrition (Units 2 & 3)	Health education		2 h	Give a talk about nutrition.

LEVEL I - LESSON PLAN

Prenatal & "Under-Five" Clinics

SUBJECT	LESSON TOPIC	PRACTICE	TIME	LESSON OBJECTIVE
Nutrition (Unit 2)	Breast feeding		1 h	Understand advantages of breast feeding; advise mothers.
Nutrition (Unit 2)	Artificial feeding	Prepare a formula	1 h	Know indications for bottle feeding and methods of preparation.
M.C.H. (Unit 1)	Prenatal/Under-Five clinic		1 h	Explain the aim of a prenatal and an under-five clinic.
M.C.H. (Unit 1)	Organization of the Center		1 h	Explain the organization of the Center; indicate in which way personnel works together to achieve the aim of the Center.
Practical Skills (Unit 3)	Laboratory techniques	Take a blood sample for: Hematocrit Hemoglobin Malarial blood smear Do a urine test for: Albumin Glucose Do a stool exam for: Parasites Eggs Worms Larvae	4 h	Carry out the specified tests.
Practical Skills (unit 3)	Administration of drugs	Practice drug administration	1 h	Read a simple prescription.

LEVEL I - LESSON PLAN

Prenatal & "Under-Five" Clinics

SUBJECT	LESSON TOPIC	PRACTICE	TIME	LESSON OBJECTIVE
Communication (Unit 2)	Visual Aids	Make visual aids from locally available material and use them for a talk about "health".	4 h	Prepare and use simple visual aids.
Practical Skills (Unit 3)	Recognition of a sick child		2 h	Recognize a sick child and refer it.
Practical Skills (Unit 3)	Home visit	Visit a family	2 h	Be able to explain the aim of the Center and its services in a simple way.
Evaluation	Post-test		2 h	Evaluate the course.
			2 h	Determine program for follow-up on-the-job training.
Practical work in a Center for one week				

LEVEL II - LESSON PLAN

Prenatal & "Under-Five" Clinics

SUBJECT	LESSON TOPIC	PRACTICE	TIME	LESSON OBJECTIVE
Pregnancy (Unit 2) Child Development (Unit 3) Nutrition (Units 2 & 3) Hygiene (Unit 4) Communication (Unit 4)	Introduction to the course	Pre-test	1½ h	Provide general information about objectives of course.
	Review of anatomy and physiology of the woman		1½ h	Be able to recall essential features of menstruation and reproduction.
	Review of anatomy and physiology of the child		1½ h	Be able to recall major functions of the body.
	Influence of nutrition on health and development		1 h	Be able to relate the influence of nutrition to: <ul style="list-style-type: none"> - development of the fetus - production of breast milk - health of the mother - development of the child
	Hygiene of health		1 h	Understand how and why cleanliness of the body and the environment can prevent diseases.
	What is communication (communication and health)		1 h	Understand the aim of communication and its use in the health field.
M.C.H. Unit 1)	Introduction to Maternal and Child Health (MCH)		1 h	Explain the MCH Center and its different services and their objectives.
Pregnancy (Unit 2)	Development of normal pregnancy		1½ h	Identify signs and symptoms of pregnancy, recall the development of the fetus.

LEVEL II - LESSON PLAN

Prenatal & "Under-Five" Clinics

SUBJECT	LESSON TOPIC	PRACTICE	TIME	LESSON OBJECTIVE
Child Development (Unit 3)	Growth and development of the normal child		1½ h	Recall major milestones of physical, psychomotor, emotional and social development.
Nutrition (Unit 3)	Nutrition and the growth of the child	Use the "road to health" chart.	1½ h	Understand the relation between nutrition and growth of the child. Use a growth chart.
Hygiene (Units 2 & 3)	Preparation of equipment	Cleaning and sterilization of equipment.	1 h	Explain the purpose of cleaning and sterilization; know the procedures used.
M.C.H. Center (Unit 1)	Prenatal and family planning clinic		1 h	Indicate the aim of the prenatal and FP clinics.
Pregnancy (Unit 2)	Factors that influence normal progress of pregnancy		1 h	Recognize heart diseases, tuberculosis, kidney diseases, diabetes, hypertension and rhesus factor, eclampsia and bleeding in the pregnant woman.
Child Development (Unit 3)	Diseases which influence normal child development		1 h	Recognize the role of malnutrition and cerebral diseases in relation to child development.
Nutrition (Units 3 & 4)	Signs of malnutrition in the child	Use the "road to health" chart to indicate malnourished children.	2 h	Recognize: marasmus, kwashiorkor, weight loss and absence of weight gain as signs of malnutrition.

LEVEL II - LESSON PLAN

Prenatal & "Under-Five" Clinics

SUBJECT	LESSON TOPIC	PRACTICE	TIME	LESSON OBJECTIVE
Hygiene (Unit 4)	Hygiene and pregnancy		1 h	Explain role of: personal hygiene, diet, rest in pregnancy.
Communication (Unit 4)	Preparation of a health education program		1 h	Identify local needs and use these to make a program.
Child Development (Unit 3)	Common children's diseases		1 h	Recognize signs and symptoms of the common diseases in children.
M.C.H. Center (Unit 1)	Under-Five clinic		1 h	Understand the aims of an under-five clinic.
Pregnancy (Unit 2)	The "high-risk" clinic		2 h	Identify women who are "high-risk" and explain steps to be taken.
Child Development (Unit 3)	Environmental factors that influence normal child development		2 h	Explain why factors in the social environment may lead to a child "at risk".
Child Development (Unit 3)	Children's diseases		2 h	Apply treatment of diseases in children.
Pregnancy (Unit 2)	Causes of infertility, advantages of spacing of pregnancies		2 h	Identify reasons for sterility; explain the need to space pregnancies.

LEVEL II - LESSON PLAN

Prenatal & "Under-five" Clinics

SUBJECT	LESSON TOPIC	PRACTICE	TIME	LESSON OBJECTIVE
Child Development (Unit 3)	Child care practices that influence normal growth and development		2 h	Identify common beliefs and habits about diseases, weaning time, use of bottle feeding, and their importance.
Drugs (Units 2 & 3)	Common preventive and curative drugs		2 h	Explain how to use common drugs and what to do in case of adverse reaction.
Nutrition (Units 3 & 4)	Budget	Make a budget	2 h	Identify the needs of a family, list priorities, make a budget.
Nursing Skills (Unit 2)	Prenatal consultation	Take: history, weight, height, blood pressure. Do: obstetrical examination, general examination, fill in prenatal card.	4 h	Recognize pregnancy and determine stage of pregnancy. Determine if pregnancy is normal or abnormal.
Nursing Skills (Unit 3)	Check-up for a child under five	Take history, do a physical examination.	4 h	Determine if the child is healthy, sick and/or malnourished. Use the "road to health" chart.
Immunization (Units 2 & 3)	Aim of immunization; immunization schedule for pregnant women and children		2 h	Explain the importance of immunization, the schedules, the contraindications and reactions to vaccines.

LEVEL II - LESSON PLAN

Prenatal & "Under-Five" Clinics

SUBJECT	LESSON TOPIC	PRACTICE	TIME	LESSON OBJECTIVE
Nutrition (Units 2 & 4)	Nutrition and pregnancy		1 h	Discuss importance of good diet for a pregnant woman; recognize taboos and beliefs which interfere with good diet.
Nursing Skills (Unit 3)	The aim of home visits		5 h	Indicate the reason for home visits, the data needed to make an optimal visit, how to carry out visit.
Nursing Skills (Unit 2)	Prenatal consultation *	Take: history, weight, height, blood pressure. Do: obstetrical examination, general examination, fill in the prenatal card. Simple blood & urine tests.	4 h	Recognize pregnancy and determine stage of pregnancy; recognize pregnancy abnormalities; show mastery of prenatal tasks.
Nursing Skills (Unit 3)	Check-up for a child under five.	Take history, weight, observe, do a physical examination, prescribe simple treatment.	4 h	Determine if the child is healthy, sick and/or malnourished. Apply treatment; show mastery of under-five tasks.
* This day's lessons and practice repeat and reinforce those of a previous day.				

LEVEL II - LESSON PLAN

Prenatal & "Under-Five" Clinics

SUBJECT	LESSON TOPIC	PRACTICE	TIME	LESSON OBJECTIVE
Immunization (Units 2 & 3)	Administration of immunizations		3 h	Show evidence of mastery of immunization tasks.
Child Development (Unit 3)	"At-risk" children		2 h	Determine when a child is "at-risk" and explain steps to be taken.
Drugs (Units 2 & 3)	How to administer common drugs		2 h	Explain how to treat common diseases, the dosage, administration.
Communication (Unit 4)	Nutrition education	Preparation of visual aids.	4 h	Ability to prepare visual aids with material that is available.
Nutrition/ Communication (Unit 4)		Prepare and give a talk about nutrition.	4 h	Explain to a mother the need for good food, the dangers of malnutrition, the importance of the weaning period.
Communication (Unit 4)	Health education	Give a health education talk.	4 h	Ability to demonstrate preparation of a meal and communicate importance.
Communication (Unit 4)	Preparation of a nutritious meal	Carry out a cooking demonstration.	2 h	
General Review and Evaluation	Review of Center's principal activities. nutrition, hygiene, child spacing, health education, communication methods.	Post-test		