PRIMARY HEALTH CARE

(NURSE CLINICIAN IN LESOTHO)

1980
Rural Health Development Project
Ministry of Health and Social Welfare
Maseru, Lesotho

BEST AVAILABLE COPY
Nurse Clinician training materials are Lesotho adaptations based upon the MEDEX prototype curriculum for training mid-level health workers.

The prototype MEDEX materials were developed by the Health Manpower Development Staff of the John A. Burns School of Medicine, University of Hawaii. The original prototypes were based on training experience in over a dozen third-world countries. These were revised on the basis of HMDS experience in Micronesia, Thailand, Pakistan, and Guyana before being made available to Lesotho under a U.S.A.I.D. funded contract.

Major adaptation in Lesotho began at the National Nurse Clinician Training Programme Curriculum Adaptation Workshop held at Mazenod in January 1980. The nearly fifty participants represented all major health and health related activities in Lesotho, both Government and private. These participants and others working as individuals and then as review committees have adapted the Nurse Clinician training materials to meet the conditions and needs of Lesotho.

The Government of Lesotho and particularly the staff of the Nurse Clinician training Programme are grateful to HMDS for supplying the prototype materials and to all those individuals who have helped in the Lesotho adaptation process.

First Edition May 1980
# TABLE OF CONTENTS

THE NURSE CLINICIAN IN LESOTHO

I. Introduction "Welcome". .......................... 5

II. Introduction to the Nurse Clinician Course. 7

III. The Health Services Delivery System. ........ 41

IV. Primary Health Care. ............................ 63

V. What is a Nurse Clinician? ....................... 73
RESOURCES FOR PRIMARY HEALTH CARE MODULE


<table>
<thead>
<tr>
<th>DAY 1</th>
<th>DAY 2</th>
<th>DAY 3</th>
<th>DAY 4</th>
<th>DAY 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
STUDENT GUIDE

THE NURSE CLINICIAN IN LESOTHO

I. Entry Level Knowledge and Skill

Before starting this unit, you should have a basic knowledge about health care in Lesotho gained from having worked as a nurse in rural areas.

II. Objectives

Using the information and experiences provided by the instructor and the module text, you will be able to:

1. Define the role of nurse clinician.
2. Describe the process by which the nurse clinician training has been developed.
3. Identify and use the various portions of the nurse clinician curriculum modules.
4. Describe the organization of Health Care in Lesotho.
5. Define the concept of Primary Health Care.
6. Identify as a nurse clinician.

III. Evaluation

MODULE PHASE

Upon completion of this module you will be rated on your attainment of the above objectives.

1. Knowledge: Written test based upon module content. Acceptable performance, 80%.


ROTATION AND PRECEPTORSHIP PHASES

Actively advocating the concept of Primary Health Care and the role of the nurse clinician in it.
IV. Activities you will be participating in to accomplish the objectives:

1. Trainees read module text on the Nurse Clinician in Lesotho and answer review questions.

2. Discussions of Lesotho health care system led by instructors.

3. Exercises, group discussion and role plays.
Today you are beginning something entirely new. New for you and new for Lesotho. All of you have been working in rural clinics. You have taken care of sick people and you have seen well mothers and children. So what is new about becoming a Nurse Clinician?

What is new is that you are going to be given a chance to prepare to do the job you are asked to do. Many of you have done it in the past, but without having a chance to prepare. What is new is the emphasis on working with villages around your clinic to help prevent disease and diagnose illness early before it gets severe. What is new is a law allowing Nurse Clinicians to practice. What is new is a new uniform, a new title, new responsibilities and new opportunities to help your people. What is new is the National commitment to a health care system including Nurse Clinicians in Primary Health Care.

From today you are not nurses - although you could go back and work as a nurse if you wanted to since you will still be under the jurisdiction of the Nursing Council. From today, you are NURSE CLINICIANS. Today you are Clinician Students, twelve months from now you will be practicing Nurse Clinicians. You still have the background of Nursing School and experience giving nursing care, but you will be learning new skills in how to help people stay healthy and in how to examine, diagnose and treat disease.

Up until today the only people in Lesotho who have had training in how to examine, diagnose and treat disease have been Doctors (and midwives who have this training for diseases of Women). And nobody has had the combined training in helping people stay healthy and in diagnosis and treatment. Thus, you are becoming a new special type of health worker. You will not be a Doctor when you finish this course. Their training takes many more years, is of a different type and prepares them to diagnose all types of disease. But you don't need that. You don't need to know how to treat malaria or cholera or many other diseases that are not a problem in Lesotho. You don't need to know how to do surgery. What you do need - and what you will get - is preparation to diagnose all the usual types of disease you will see in your clinic, to treat those that can safely be treated in your clinic, and to recognize and refer those that require hospital care.
From now on when a Doctor comes to your clinic, he will not be there to see all the people you can rush by him no matter what their problem - from general aches and pains to sore throats. What will happen, is that the Doctor coming to your clinic will consult with you on difficult cases . . . on illnesses that have not healed normally, on diagnoses you are not sure of. The visits will be used to constantly maintain and improve your skills.

You are becoming a new part of a new type of Health Team. A team because only by working together can you and other health workers bring health care to all the people. A team that will bring Primary Health Care to all of the people of Lesotho and that will make a full range of health care services available as they are needed. So today you are beginning something entirely new.
II Introduction to the Nurse Clinician Course

A) COMPETENCY BASED TRAINING

The training curriculum for both you, the Nurse Clinician, and for the Village Health Worker has been developed using the competency-based training systems. Competency-based curricula differ from more traditional curricula that you have had in school before in two major respects:

1. Competency-based training relates content directly to job performance. Only skills and knowledge which can be directly beneficial to you in the performance of your job are included. In contrast, traditional curricula generally attempt to establish a knowledge base. The student then draws from this knowledge to perform his job. This knowledge may or may not be relevant to the job requirements.

2. The evaluation procedure. You will know the desired outcomes of training when you begin and your successful completion of the programme is based upon the attainment of these competencies.

Your active participation in the learning process required in order to accomplish the objectives of competency-based training. Thus, great emphasis will be placed on active learning. Active learning experiences are designed to increase motivation, improve retention of learned information, and prepare for evaluation.

It is quite easy to have a training programme with a curriculum that contains considerable irrelevant material and at the same time omits some essentials. Most of us know this from personal experience. Competency-based training attempts to prevent this from occurring.

First, a job description was created. Using this job description as a basis, the objectives for your training programme were identified. Learning activities were selected that will be most appropriate to prepare you to meet the objectives. Finally, both you and the training programme will be evaluated by determining how well you have met the objectives. The findings of the evaluation will then be used to appropriately modify the objectives and/or learning activities.

Competency-based training

<table>
<thead>
<tr>
<th>Job Description</th>
<th>Behavioral Objectives</th>
<th>Learning Activities</th>
<th>Student Evaluation</th>
</tr>
</thead>
</table>

———

———
## Nurse Clinician Course

<table>
<thead>
<tr>
<th>Module Phase</th>
<th>Rotation Phase</th>
<th>Preceptorship</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time</strong></td>
<td><strong>8 Months</strong></td>
<td><strong>4 Months</strong></td>
</tr>
<tr>
<td><strong>Activity</strong></td>
<td><strong>Develop Knowledge &amp; Skill Proficiency</strong></td>
<td><strong>Gain Clinical Experience While Supervised</strong></td>
</tr>
<tr>
<td>- Demonstrations</td>
<td>- Community</td>
<td>- Clinic Management</td>
</tr>
<tr>
<td>- AV</td>
<td>- Clinical</td>
<td>- Training of VHWS</td>
</tr>
<tr>
<td>- Self Instruction</td>
<td>- Maternal &amp; Child Health</td>
<td>- Role Play</td>
</tr>
<tr>
<td>- Discussion</td>
<td>-</td>
<td>- Community Experience</td>
</tr>
<tr>
<td>- Clinical Experience</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Staff Responsibility
- Teaching & Supervision
- Supervision & Guidance
- Supervision

### Location
- Classroom
- Clinics & Hospital Wards
- Community
- Assigned Clinics
B) THE NURSE CLINICIAN TRAINING PROGRAMME DESIGN

Your training programme will be divided into three phases: module, rotation, and preceptorship, plus continuing education.

1. During the module phase of training, you will focus on mastering the skills and knowledge presented in the modules, and a variety of learning activities are used primarily in a classroom setting. You will have regular times for practical experience both during the days of classroom work and in special week-long periods set aside for clinical experience.

2. During the rotation phase, you will be trained in patient management skills as you rotate through a series of outpatient clinics and wards.

3. The third phase is the preceptorship. During the preceptorship, you will hone your skills and learn to function in your actual job situation under close supervision.

These three phases are particularly well suited to training programmes within the public sector of health care services.

4. Continuing education is very important and will not be forgotten. Planning for continuing education has been included in the design phase of the programme.

There is no substitute for periodic in-service training. The time spent for the in-service training will be more than compensated for through increased wisdom and skills.

Continuing education material will also be developed using the module format that you will be using this year. Such training is necessary if the programme is to remain dynamic. Your tasks will change as government priorities, health problems, community needs, equipment, and supplies are altered. The subsequent addition of new health care tasks and duties will require additional training. Further, there is inevitably some deterioration of previously learned knowledge and skills over the years. (This is true of all levels of personnel.)

Competency-based training was selected for your course because it has been shown in similar programmes in other countries to be the best and easiest way for you to learn the many important things necessary for a Nurse Clinician. Modules were chosen as the format for material presentation since modules allow for fulfillment of many of the competency-based tenets.
During each phase of your training, your success in fulfilling the stated training objectives will be measured. Frequent assessment will provide you with feedback about your progress and provide your instructors with insight into your deficiencies. If one of you falls below the established standard, she will be retrained since learning these skills and knowledge is necessary for you to be able to do the job. If most of you are experiencing difficulty in achieving the standard, the training methods and module materials should be reviewed.

The following evaluation tools are used during training:

1. Module phase
   a. Written tests of knowledge
   b. Performance ratings of skills

2. Rotation and preceptor phases
   a. Record of clinical and preceptorship experiences
   b. Evaluation of performance by observation
Before your competency-based training system was developed, the functions of the future nurse clinicians were clearly identified. The first step in developing or adapting your competency-based training materials was to define what you will be expected to do by analysing the job of a nurse clinician. This was done here in Lesotho to reflect the needs, resources, and constraints of the health services system in Lesotho.

This job analysis process resulted in the creation of a performance-based job description consisting of: 1) major job tasks, 2) a series of sub tasks called duties, and 3) a series of sub duties called skills. Once this process was completed, the training programme was designed to meet these requirements.

The diagram on the next page provides definitions of the job analysis components and also examples of each component taken from a completed work analysis. Study these and consider the relationships among the parts. Also compare this with the diagram above. After reviewing these diagrams and discussing the relationships of the Job Analysis components, you should be capable of classifying a job-related item as knowledge, skill, duty or task.
### JOB ANALYSIS DEFINITIONS

<table>
<thead>
<tr>
<th><strong>Definition</strong></th>
<th><strong>Example</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KNOWLEDGE</strong></td>
<td>That which needs to be known or learned in order to perform the duty.</td>
</tr>
</tbody>
</table>
| **SKILL**      | The actual activity that accomplishes the duty. | Identification of the following physical examination discriminators:  
- tenting of skin  
- sunken eyes  
- sunken fontanelle  
- deep and rapid respirations |
| **DUTY**       | A series of steps into which a task activity can be divided and which is comprised of knowledge and skills | Clinical management of patients presenting with diarrhoea (and dehydration) in the clinic. |
| **TASK**       | A broad general description of behavior that consists of more than one duty. | The diagnosis and management of common pediatric problems in Lesotho by NCS and VHWs. |
| **JOBS**       | A group of positions which have identical tasks. | Job of nurse clinicians.  
Job of village health workers. |
Give us some feedback about the effectiveness of the presentation by classifying the following items as Task (T), Duty (D), Knowledge (K), Skill (S).

1. ___ preparation and feeding of oral rehydration solution.
2. ___ the formula for oral rehydration solution.
3. ___ diagnosis or worm infestation in children.
4. ___ diagnosis and management of ear, nose and throat problems.
The job analysis or task list for your new position, nurse clinician, was produced at a Curriculum Adaptation Workshop held in Mazenod during January, 1980. Doctors and Matrons from both government and private hospitals, officials from MOHSW and PHAL, clinic and public health nurses, and others with whom you will be working, analysed the job that needs to be done and produced the following list:

**Task List-Nurse Clinician**

**I. General Clinic**

A. Diagnose and Manage Common Skin Problems,
B. Diagnose and Manage Common DEENT Problems,
C. Diagnose and Manage Common Problems of the Respiratory System and Heart,
D. Diagnose and Manage Common Gastro-Intestinal Problems,
E. Diagnose and Manage Common Genito-Urinary Problems,
F. Diagnose and Manage Common Medical Conditions,
G. Diagnose and Manage Common Mental Health Problems,
H. Diagnose and Manage Common Communicable Disease Conditions.

**II. Trauma and Emergency**

A. Diagnose and Manage Common Trauma and Emergencies.

**III. Maternal and Child Health**

A. Diagnose and Manage OB and GYN Conditions,
B. Participate in Conduction Child Care Clinics,
C. Provide Child Spacing Services,
D. Diagnose and Manage Common Problems of Infants and Children,
E. Participate in Conducting Antenatal and Postnatal Clinics,
F. Diagnose and Manage Labour and Delivery
IV. Community Health.

A. Organize and Supervise Community Environmental Health Programme,
B. Organize and Conduct Family Planning Education,
C. Provide Nutrition Education to adults, especially women and parents of young children, in order to Improve Health,
D. Participate in Organizing and Conduction School Health Programmes.

V. Village Health Workers.

A. Train Village Health Workers.

VI. Management of Primary Health Care System

A. Direct the Planning, Organization, Coordination, Supervision and Evaluation of the Health Team and its Activities,
B. Utilize External Management Support System,
C. Manage Clinic, including:
   - Record Keeping,
   - Statistics,
   - Drug and Equipment Supply,
   - Referral System,
   - Maintenance,
   - Financial Control.

After defining what your job will be, the participants at the Curriculum Adaptation Workshop examined the special circumstances in Lesotho that will affect what should be included in the curriculum of the nurse clinician and the village health worker. The areas considered were:

1. Diseases found in Lesotho,
2. Who will have responsibility for diagnosing and treating the given diseases,
3. The support systems of health services as they will affect the functioning of the nurse clinician, including referral patterns, supervisory patterns, availability of drugs and supplies, and transportation and communication patterns.
Disease Definition

The participants considered what the most common diseases found in Lesotho were and of those diseases which ones should be incorporated into the training programme for the nurse clinician and for the village health worker.

Below is the list of the diseases to be included in the nurse clinician curriculum:

**Common Skin Problems**

- Anal Fissures
- Boil
- Cellulitis
- Chronic Ulcers
- Dermatitis
- Drug reaction
- Eczema
- Haemorrhoid
- Herpes simplex
- Impetigo
- Insect Bites
- Lice
- Pinworms
- Ringworm
- Scabies
- Skin manifestations of generalized disease
- Tinea Versicolor
- Warts

**Dental, Eye, Ear, Nose, Throat Problems**

- Anterior nasal haemorrhage
- Blindness
- Canker sore
- Conjunctivitis
- Corneal ulcers
- Dental abscess
- Dental decay
- Foreign bodies (F.B.s)
- Gingivitis
- Glaucoma
- Otitis media (chronic and acute)
- Pterygium
- Stye
- Tonsillitis
- Ulcerative gingivitis
- URI (viral)

**Respiratory System and Heart Problems**

- Acute bronchitis
- Bronchial asthma
- Cardio-vascular heart failure (CHF)
- Chronic bronchitis & emphysema
- Influenza
- Pleural fluid
- Pleurisy
- Pneumonia
- Rheumatic heart disease
- Tuberculosis

**Gastro-intestinal Problems**

- Acute abdomen
- Acute appendicitis
- Cirrhosis
- Dysentery
- Enteric fever (typhoid)
- Gastroenteritis
- Hyperacidity and peptic ulcer disease
- Intestinal obstruction
- Parasite (round worms, thread worms, tape worms)
- Viral hepatitis
### Genito-urinary Problems
- Gonorrhea
- Nephritis
- Nephrotic syndrome
- Penile swelling
- Prostate disease
- Scrotal swelling
- Syphilis
- Urethral stricture
- Urinary tract infection (UTI)
- Urinary tract stones

### Communicable Diseases
- Diphtheria
- Leprosy
- Meningitis
- Osteomyelitis
- Tetanus
- Tick Bite Fever
- Typhus

### Common Medical Conditions
- Cancer
- Cerebral vascular accident (CVA)
- Diabetes mellitus
- Epilepsy
- Headache
- Hypertension
- Low backache
- Osteoarthritis
- Rheumatoid arthritis
- Thyroid disease

### Diseases of Infants and Children
- Bronchitis
- Burns
- Chicken pox
- Club Foot
- Croup
- Diarrhoea & Dehydration
- High Fever
- Hydrocephalus
- Jaundice
- Low birth weight
- Malnutrition
- Measles
- Meningitis
- Mumps
- Newborn septicaemia
- Pneumonia
- Poisoning
- Polio
- Rheumatic fever
- Spina Bifida
- Strabismus
- Thrush
- Whooping Cough
- Other Congenital abnormalities

### Problems of Women
- All breast problems
- Anaemia in pregnancy
- Bleeding early in pregnancy
- Bleeding late in pregnancy
- Infertility
- Intrauterine fetal death
- Menometrorrhagia
- Menopausal associated problems
- Ovarian tumour
- Pelvic inflammatory disease
- Pseudo pregnancy
- CA of cervix and uterus
- Diabetes in pregnancy
- Dysmenorrhoea
- Ectopic pregnancy
- Puerperal sepsis
- Toxaemia
- Unwanted pregnancy
- Uterine fibroids
- Vaginitis - trich, monilia, nonspecific, senile
- Vulvar swelling

### Mental Illness
- Acute Psychotic reactions
- Chronic Psychotic reactions
- Hysteria reactions
- Anxiety reactions
- Affective disorders
- Depressions
- Alcohol Abuse
- Drug Addiction and Dependence
- Phobias
- Psychosomatic Reactions
- Mental deficiency
EXERCISE 2

Let's put to practice the methods used on developing your curriculum.

STEP 1 - Imagine that you need to train someone who has never done a certain task before how to do that task. You may choose any simple task you want. Examples that you might choose, could be: Prepare dinner for a family; Change an infant's nappies; Drive an automobile; Ride a horse. You may choose any of these tasks or any other that you wish.

STEP 2 - Using Worksheet 2A, analyse the task you have chosen and write down the Duties, Skills, and Knowledge necessary for that task.

STEP 3 - Form into three groups and discuss the Task Analysis Tables you have made in Step 2.

STEP 4 - After the discussion of the Task Analysis Tables, as a group choose one Task that was presented in your group. Make any improvements you can and prepare to present it to the class.

STEP 5 - Each group will present its group's Task Analysis to the class.
## TASK ANALYSIS TABLE

<table>
<thead>
<tr>
<th>TASK:</th>
<th>SKILLS</th>
<th>KNOWLEDGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme Objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DUTIES</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
E) COURSE FORMAT

Now that we have described what you will be taught and why, we need to discuss how you will be taught. We have already used the term "module", so let's begin with that.

What is a module?

"A module is a group of learning experiences intended to assist the student attain a set of objectives."

Why use a modularized instruction?

A module is a simple way of organizing instructional material to fulfill the requirements of competency-based training.

Instruction using the modules allows the incorporation of the following competency-based training principles.

1. Development of objectives that are necessary for you to accomplish so that you will be able to do your job.

2. Evaluation of your skills and knowledge in each subject before you begin to study it so that your instructors will be able to begin teaching from what you already know.

3. The inclusion of different types of learning experience that will enable you to attain the pre-specified competency.

The modules which were developed by the Health Manpower Development Staff of the University of Hawaii (MEDEX) are presented in the following manner:

I. Module Text

A. Task Analysis Table
B. Student Guide
C. Content presentation (disease description in clinical module)
D. Review questions and exercises
E. Skill descriptions
F. Skill evaluation
   1. Module phase
      -Student evaluation checklist
      -Student performance record
   2. Rotation/preceptor phase
      -Student evaluation record
II. Instructor's Materials

A. Instructor's Manual
   1. Objectives
   2. Schedule
   3. Teaching Plans

B. Visual or audio-visual training supplements

C. Evaluation materials
   1. Pre/Post tests
   2. Skill evaluation
      - Module phase
         -- Student evaluation checklist
         -- Student performance record
         -- Student examination evaluation sheet
      - Rotation/Preceptor phase
         -- Evaluation record

III. Training and Field Reference Material

   A. Diagnostic protocols
   B. Management protocols
   C. Formulary

These modules from MEDEX were used as a basis from which your modules have been adapted and developed here in Lesotho. The same people who participated in the Curriculum Adaptation Workshop have worked over the months since to prepare your modules.
MODULE COMPONENTS and RELATIONSHIPS

I. Module Text

The module text is the written material that will be given to you. The components of the modules text are:

A. Task Analysis Table

The Task Analysis is the skeleton of the module text and was the first thing they developed. The purposes of this analysis are:

1. To guide the development of the module content so that it is specific for your job.
2. To display the relationship of the job to the training.
3. To show what the training activities will be.
<table>
<thead>
<tr>
<th>TASK ANALYSIS TABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASK: Diagnose and Manage Common Gastro-Intestinal Problems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programme Objectives</th>
<th>SKILLS</th>
<th>KNOWLEDGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DUTIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0 Do a medical history and physical examination on every patient with a gastro-intestinal complaint, using the diagnostic protocols as guidelines.</td>
<td>1.1 Use of protocols for G.I. complaints</td>
<td>1.1.1 How to use protocols involving common problems of G.I. system</td>
</tr>
<tr>
<td></td>
<td>1.2 Physical Exam Techniques</td>
<td>1.2.1 Anatomy and physiology of G.I. system</td>
</tr>
<tr>
<td></td>
<td>--abdomen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-inspect -auscultate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-palpate -rectal exam</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-percuss</td>
<td></td>
</tr>
<tr>
<td>2.0 Determine the most likely of the following diagnoses</td>
<td>2.1 Physical Exam Discriminations</td>
<td>2.1.1 Pathophysiology of common G.I. problems</td>
</tr>
<tr>
<td></td>
<td>-Hyperacidity &amp; peptic ulcer disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Acute appendicitis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Acute abdomen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Intestinal obstruction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Viral hepatitis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Cirrhosis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Enteric Fever (typhoid)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Dysentery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Parasite (round worms, worms: thread, tape worms)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Gastro-enteritis</td>
<td></td>
</tr>
<tr>
<td>3.0 Manage the above problems using the management protocols as guidelines. Management includes: initial treatment, referral, follow-up treatment, and prevention.</td>
<td>3.1 Management Procedures (skills)</td>
<td>3.1.1 Management techniques for G.I. problems</td>
</tr>
<tr>
<td></td>
<td>-Pass N.G. tube</td>
<td></td>
</tr>
</tbody>
</table>
B. Student Guides

The Student Guide will provide you with all the information that you will need in order to participate in the learning activities of the module.

1. Entry Level Knowledge and Skill
   This allows you to know what you are expected to know before starting this module.

2. Objectives
   The objectives are developed using the task analysis table as a guide.

3. Evaluation
   MODULE PHASE: Written test and skill performances help you identify your knowledge/skill gain.
   ROTATION AND PRECEPTORSHIP PHASE: Clinical evaluation of diagnosis and management.

4. Activities
   A description of the activities you are expected to participate in so that you can prepare for them and enjoy a good learning experience.
STUDENT GUIDE

RESPIRATORY SYSTEM:
ANATOMY, PHYSIOLOGY AND PHYSICAL EXAMINATION

I. Entry Skills and Knowledge

Before starting this Unit, you should be able to:

1. Define the words listed in the glossary pertaining to the respiratory system.
2. Explain the normal anatomy and physiology of respiratory system.

II. Objectives

Using the information and experiences provided by the instructor and the module text, you will be able to:

1. Identify the structures of the respiratory system and define their functions.
2. Explain the mechanics of breathing.
3. Demonstrate a physical examination of the chest, including the following:
   a. inspection       c. percussion
   b. palpation      d. auscultation
4. Describe normal and abnormal physical exam findings:
   a. dullness to percussion       g. cyanosis
   b. wheezing               h. flaring nostrils
   c. rales               i. sternal retraction
   d. rhonchi          j. abnormal fremitus
   e. dyspnoea              k. increased/decreased breath sounds.

III. Evaluation

Upon completion of the module, you will be assessed on:

1. Knowledge: Written test based upon content of unit in module text. Acceptable performance, 80%.
2. Skill: Physical exam of respiratory system.
IV. Activities you will be participating in to complete the above objectives.

1. Students read module on the anatomy, physiology and pathophysiology of the respiratory system, and answer review questions.

2. Instructor presents slides or A/V presentation to clarify and reinforce module text.

3. Instructor conducts discussion session to reinforce text and slide or A/V presentation.

4. Students read module text on physical exam techniques for examination of the chest and answer review questions.

5. Instructor or assistant demonstrates physical exam of the chest and describe abnormal signs.

6. Students practice recognizing signs of abnormal respiratory functions in clinical setting.
E. Skill Descriptions

Each module has a number of management procedures which need explanation and practice. In the skill descriptions section written information, drawings, graphs, and pictures can be presented which assist the trainer to prepare for practice. Review questions also follow the skill descriptions.

**THERAPEUTIC AND CONTINUING CARE SKILL**
**CLEANING THE EYES**

**Supplies**
Sterile cotton tipped applicators or sterile 2x2-inch gauze pad.

**Purpose of Procedure**
The purpose of the procedure is to remove the crusted pus of a bacterial conjunctivitis from the eyelids and eyelashes causing the eyelids to stick shut and to remove pus from the inside of the eye before applying an eye medication.

**Steps in Procedure**
After you have located the supplies you need, wash your hands with soap and water before starting the procedure. Moisten the cotton tipped applicator or sterile gauze with the normal saline. With the patient lying on their back, gently wash away the crust and pus from the eyelids, lashes and lid margins moving from the nose outward (Fig. EY 32). Continue to repeat this step until the eye can be opened. The eye should then be dried with a sterile gauze before an eye medication is added to the eye. These steps are then repeated for the other eye. After both eyes have been cleaned and the medications added, wash your hands with soap and water.

When a patient or a mother of a patient is sent home with eye medications for a bacterial conjunctivitis, they are to be instructed that the eyes are to be washed each time before applying the medication. Small pieces of cloth which have been boiled and dried can be used at home. Each cloth is to be moistened with water which has been boiled. The same procedure is to be followed and the eyes are to be dried before the medication is added to the eyes. The cloth is to be thrown away after it has been used once unless it is boiled and dried again before use. The patient or mother of the patient is to wash their hands with soap and water following the application of the eye medication.

**Results**
Proper cleaning of the eye will help the eyes to heal faster and is one step in preventing the infection from spreading.

*Figure EY 32 - Cleaning the Eyes: Gently wash away the crust and pus from the eyelids, lashes and lid margins moving from the nose outward.*
F. Skill Evaluation

1. Module Phase

   a. Student Performance Record

   These lists are developed to provide guidelines for the assessment of your skills by instructors and as records of your progress in skill attainment throughout training.

   Before you can advance to the rotation/preceptor phase of training, a staff member will evaluate mastery of the physical examination procedures and discriminations which have been identified in the modules.

   **COMMUNICABLE DISEASES**

   **PERFORMANCE EVALUATION CHECKLIST**

   This checklist will be used by tutors/supervisors when evaluating nurse clinician performance. The student is advised to use them as a guide when practicing.

<table>
<thead>
<tr>
<th>SKILL</th>
<th>Performed Acceptably</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis of Leprosy:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Did nurse clinician tell the patient of her intention?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Did nurse clinician demonstrate exam on someone else?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Did nurse clinician touch cotton wool to normal skin?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Did nurse clinician ask patient to close eyes and keep them closed during the exam?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Did nurse clinician touch healthy skin and ask patient to indicate the site?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Did nurse clinician use pointed end of cotton wool?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Did nurse clinician alternate touching lesions and normal skin?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Did nurse clinician inspect and palpate both:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- great auricular nerves?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- ulnar nerves?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- cutaneous branch of radial nerve at wrist?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- median nerve?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- lateral popliteal nerve?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- posterior tibial nerve?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
F. Skill Evaluation

1. Module Phase (continued)

b. Student Evaluation Checklist

You will use this checklist as a guide when practicing the skills in the module. You will have the opportunity to be rated on your performance of these skills at any time during the module phase.

You can prepare for this evaluation by doing the following:
- Work on perfecting technique of examination with another student.
- During the clinical practice time provided, practice the skills.
- Have a fellow student observe and evaluate performance.
- When ready, ask a trainer to observe and rate performance.
- If performance is unacceptable, the trainer will give specific comments on how to improve.
- Practice again until you are ready for evaluation.

STUDENT CHECK LIST
PHYSICAL EXAMINATION DISCRIMINATIONS

<table>
<thead>
<tr>
<th>Physical Exam</th>
<th>Student Self-Check</th>
<th>Supervisor's check</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Evaluate general appearance:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. examine neck, palms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. inspect skin for discoloration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. umbilical cord</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Vital Signs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. pulse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. respiration rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. temperature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sculo-skeleothl</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>termine joint</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
F. Skill Evaluation

2. Rotation

a. Performance Check List

Since the focus of competency-based training is on performance, the emphasis in student evaluation during rotation/preceptorship phase is on performance.

This evaluation expects you to integrate diagnostic and management skills and to take responsibility for being assessed on the accomplishment of these skills.

<table>
<thead>
<tr>
<th>Problem and Recommended</th>
<th>Supervisor initials a box for each problem successfully diagnosed and managed by nurse clinician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rheumatoid Arthritis</td>
<td></td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td></td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td></td>
</tr>
<tr>
<td>Thyroid Disease:</td>
<td></td>
</tr>
<tr>
<td>-hypertension</td>
<td></td>
</tr>
<tr>
<td>-hypotension</td>
<td></td>
</tr>
<tr>
<td>-simple goiter</td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td></td>
</tr>
<tr>
<td>Epilepsy</td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td></td>
</tr>
<tr>
<td>CVA (Stroke)</td>
<td></td>
</tr>
</tbody>
</table>
II. Training and Field Reference Materials

A. Diagnostic Protocols

Diagnostic protocols are explicit diagrams for determining the most likely cause for a presenting complaint.

<table>
<thead>
<tr>
<th>Sx/Signs</th>
<th>Problem</th>
<th>Patient Care Protocol</th>
<th>Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Eye,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New born infant</td>
<td>YES</td>
<td>Newborn conjunctivitis</td>
<td>EENT Problems page 28</td>
</tr>
<tr>
<td>History of trauma with pain</td>
<td>YES</td>
<td>Any spot on the cornea</td>
<td>Corneal ulcer EENT Problems page</td>
</tr>
<tr>
<td></td>
<td>NO</td>
<td>Watery with visible foreign body</td>
<td>Foreign body T&amp;E 11 EENT Problems page</td>
</tr>
<tr>
<td>Loss of vision</td>
<td>YES</td>
<td>Possible serious condition</td>
<td>Refer EENT Problems page</td>
</tr>
<tr>
<td>Pain in one eye AND pupil does not react to light AND is dilated</td>
<td>YES</td>
<td>Glaucoma</td>
<td>None EENT Problems page</td>
</tr>
<tr>
<td></td>
<td>NO</td>
<td>(continued)</td>
<td></td>
</tr>
</tbody>
</table>
B. Management Protocols

Management protocols, similar to diagnostic protocols, give explicit directions, in this case for the management of the various common problems. Alternatives are provided to allow for variables such as severity of illness, availability of drugs, patients ability to return for follow-up, access to hospital care, etc.

**PROTOCOL NO. 4**

*Burns*

**Patient burned**

Respiratory involvement?

- Yes: Follow Protocol No. 1 then return here
- No: Signs of shock?

- Yes: Follow Protocol No. 2 then return here
- No: Minor burns?

- Yes: Does burn show signs of infection OR does patient have fever OR has a contaminating traditional treatment been used?
  - Yes: - give penicillin
  - - clean burn
  - - dress burn
  - - tetanus prophylaxis
  - - encourage fluids
  - - same as above but no penicillin
  - No: 1. Calculate fluid replacement: \( \frac{w \times 7.2}{2} \) burn
  2. Start IV infusion
  3. Begin fluid replacement
  4. Tetanus prophylaxis
  5. Penicillin
  6. Protect from infection
  7. Refer to hospital

- No: Minor burns?

  - All 1° burns?
  - OR
  - Less than 5% 2° (child) OR 10% 2° (adult)?
    - Yes: - give penicillin
    - - clean burn
    - - dress burn
    - - tetanus prophylaxis
    - - encourage fluids
    - No: 1. Calculate fluid replacement: \( \frac{w \times 7.2}{2} \) burn
      2. Start IV infusion
      3. Begin fluid replacement
      4. Tetanus prophylaxis
      5. Penicillin
      6. Protect from infection
      7. Refer to hospital
F) TRAINING OF VHW

It is government policy that each village should be able to have its Village Health Worker. The training and supervision of these VHWs will be one of your responsibilities as a nurse clinician.

As a part of your nurse clinician training course, you will be taught how to train and supervise the VHW. Training VHW is just another part of your training programme in the same way that diagnosing and treating illness is and that preventing illness is. The VHW should be thought of as another of the methods of improving health of the people in your area in the same way that a vaccine is a method and that drugs are a method of improving health. None of the methods can be neglected. All must work together if Primary Health Care can work.

The training of VHWs is to be done in their villages and at your clinic. As you will be learning, you will be expected to spend quite a bit of your time in the villages, working with the VHW and the communities directly away from your clinics. This may, at first, seem difficult, but it can and must be done. Unless it is done and diseases are prevented, your job will be impossible. Working with, and in the community, is a very important part of your job as a nurse clinician. You will be learning how to do this during your training programme. Your supervisor will expect you to do it after you finish the course. Your job performance will evaluate this part of your job just as much as it will evaluate your clinic work.

G) VHW TRAINING MATERIALS

The VHW materials incorporate almost all of the competency based training components of the N.C.modules. The module components include: task analysis; instructional objectives; design of the module text; and an instructor's manual. In addition, the materials include a VHW reminder component which is given to the VHW at the completion of the training.

The design and development of the VHW module texts is based on the oral tradition existing at the community level. Thus, this section of the VHW materials is distinguished from your other modules through the use of role modeling in a simulated environment, an unique method for transferring competency in the oral tradition.
MODELING

In all traditions, people have a natural tendency to teach or share information in the same manner in which they have been taught: telling a story; sharing a picture or photo; reading; lecturing; or demonstrations. This importance is recognized with the inclusion of "modeling" as the basic instructional feature of the VHW materials. The training sessions for the VHWs incorporate this concept. If the ultimate goal is for the VHW to actually demonstrate healthful practices in the village, then your training and your VHWs training should include appropriate modeling techniques.

1. The nurse clinician tutors "role play" and "demonstrate" the content materials in their teaching sessions for the nurse clinician.

2. The nurse clinician "role play" and "demonstrate" the content materials in their training sessions for the VHW.

3. The VHWs "role play" and "demonstrate" content materials in their village communities.

EXPERIMENTAL APPROACH TO LEARNING

Another distinguishing feature of the VHW materials is the inclusion of "leading questions". This allows for greater relevancy to the situation and health practices of each community.

Villages and communities in most cases will judge the relevancy of information and its effect on their lives through acceptance or rejection of new ideas. If content information is "irrelevant" or "foreign" such as the use of scientific or medical words (germ or bacteria, etc.) it will be more difficult to encourage communities to adopt practices which may contribute to their own or their children's health.

1. What do villagers or communities know about it? (a symptom, disease etc.)

2. What do villagers or communities do about it?

3. What should be done about it?

4. What obstacles need to be overcome to do it?
From the information gathered, you can incorporate local terminology into the teaching content; will learn existing individual or community treatments; can formulate a basis for understanding possible resistant factors to the change to good health habits; can acknowledge and become acquainted with traditional healers; and, if possible, work towards their cooperation and perhaps co-option in the delivery of health in the village communities.

INTEGRATION OF CONTENT AND APPLICATION THROUGH ROLE PLAY

Role play forms an integral part of the VHW materials and is used in each lesson. It may be the most important technique within the village health worker materials. The use of this technique makes the things learned be simple and practical. Done in the simulated village context, this allows for the best use of existing skills, some of which will include appropriate village level communication and social interaction.

Usual educational approaches to subject matter include lectures or formal talks and practice of a few skills. Often these are learned without a practical understanding of their use and usefulness.

Most educators do add an "after-thought" section for practical application which include field trips, field experiences, or a few hypothetical situations to the main body of the lesson. However, they are often left to the "do if you like" position. If time runs out, or if the tutor is not comfortable with practical application aspects, they are often omitted with phrases such as:

"Well you've all been in a village. You know how to do it, so we'll skip this section."

"You know how to make the solution; therefore, we don't have to do it in this lesson."

This same escape mechanism is then used by the nurse clinician teaching the VHW in the clinic and then by the VHW when meeting, working with, and teaching his community.

The use of role play and simulation technique in each lesson reduces the chance of this escape mechanism occurring. The VHW materials incorporate this technique from the beginning of each lesson to show the new content within village-like situations. The VHW learns and practices his/her techniques in a simulated real life setting. Thus, the VHW is not required to try to figure out when, where, and what to use in his village. He has had practice in this from the first day of training. This then, is further refined with review discussions and home visits.
Just as your curriculum was developed from a job analysis at the Curriculum Adaptation Workshop, in a similar manner, representatives from the experimental VHW programmes and others, developed a task list and disease list for VHWs as the basis for the VHW training.

**Task List - Village Health Worker**

1. Assist the village in developing and maintaining safe water supply and sanitation,

2. Identify village health needs and facilitate utilization of resources to meet these needs:
   - assist health team in controlling outbreaks,
   - assist village chief with vital statistics,
   - cooperate with extension workers.

3. Promote good nutrition and recognize, manage and follow-up under-nourished children,

4. Promotion of MCH Care, including ANC, PNC, Child Care, and FP,

5. Identify and manage common clinical problems:
   - assist in the follow-up of patients as required,

6. Prevent and manage vomiting and diarrhoea:
   - dehydration,

7. Promote personal hygiene and healthful living,

8. Recognize, refer and follow-up TB and Leprosy patients,


The list of diseases to be included in the training programme for the VHW is as follows:

1. Conjunctivitis
2. Diarrhoea and dehydration
3. Infected skin lesions
4. Gonorrhoea
5. Headache
6. Leprosy
7. Malnutrition
8. Respiratory infections (bronchitis, pneumonia, URI)
9. Scabies
10. Syphilis
11. Tuberculosis

Also, instruction in first aid.
UNIT 2 REVIEW QUESTIONS

1. Our new training system is called "_______________________________."

2. The two ways it differs from other training are:
   a. 
   b. 

3. The training system tries to omit ________________ and ensures inclusion of ________________.

4. The first step in formulating the training was to create the nurse clinician ________________.

5. The four phases of your training will be:
   a. 
   b. 
   c. 
   d. 

6. Of the ways you will be evaluated, knowledge and performance, the most important is ________________.

7. The parts of your job analysis are:

   |   |   |   |
   |   |   |   |
8. The sections of your curriculum, groups of learning experiences intended to assist you attain a set of objectives are called ________________.

9. The parts of the module text are:
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 

10. Part of your responsibility will be to __________ and ______________ Village Health Workers.

11. People tend to teach or share information in the manner _________________.

12. Probably the most important technique you will use in training VHW is _________________. 
III THE HEALTH SERVICES DELIVERY SYSTEM

Before going any further, it is important to review the past and present health care system in Lesotho. Even though you have worked as a nurse for several years, it is unlikely that you have come in contact with, or even heard of all parts of the health care system of Lesotho. What facilities and personnel there are and how they interrelate determines what services are available to those needing them.

The health services delivery system of Lesotho has evolved since independence from its beginnings about a hundred years ago. Some of us may be familiar with the system and how it is structured. We know best those parts of the system with which we worked in the past and for which we were directly responsible. It is necessary that we know and understand the structure and function of the system as it exists.

As nurse clinicians, we are expected to function in a role which is new in our organized health services delivery system. In order to function effectively in this new role, we need to know how we must relate to other parts of the system. We must be aware of and responsive to:

- What services are available in the health care delivery system and its sub-systems.
- How the services are organized within the system.
- How the system functions to provide services when and where needed.
- How we as nurse clinicians may utilize these resources to benefit the community.

This overview of the health services delivery system will help us understand our role and responsibilities within the system. We must be able to use components of the system in the course of our work. We must also be able to give accurate information to others about the system. Above, we must use this knowledge to coordinate activities at the local level in an effective manner.
A) HISTORICAL CONSIDERATIONS

The organization and function of the individual health service delivery sub-systems were created to meet recognized needs by government and private organizations at a particular time. The way these sub-systems were organized to function reflects the capability which existed at a particular time to respond to those needs.

For the most part, emphasis was placed upon care and treatment of some persons who were ill, and, to a much lesser extent, upon prevention of the spread of disease between individuals. The clinical efforts used were not organized nor deployed to prevent disease. The preventive programmes employed were aimed at the prevention of the spread of disease rather than prevention of the disease or illness. In general, the health services delivery system, as organized, provided curative services.

It is necessary that essential health services be made available to individuals in the community in ways that are acceptable to them. These basic services should be a part of the existing health system and the overall social and economic development of the country. In order to accomplish this, we have adopted the Primary Health Care Concept including the nurse clinician as a critical mid-level health worker and the village health worker.

This approach serves to encourage and strengthen the provision of primary health care services at the local level where services are most needed. Use of this approach also utilizes the national health services delivery system at all levels of the system and permits integration of existing health services. The overall effect is to improve and strengthen the national health planning system; the national health service delivery system, and management support systems of the country.

B) THE MINISTRY OF HEALTH

The Ministry of Health and Social Welfare is one of a number of ministries responsible to the prime minister. The Minister of Health has responsibility within the government for development and implementation of health care policies and procedures. Government health policies change from time to time according to the needs of the country and the resources which are available.
The MOHSW is organized to carry out its functions which are required by established policy and procedures. The MOHSW provides many of the health services which are provided in this country and is responsible for coordinating those provided by private organizations. (We will talk more about these later when we discuss the Private Health Association of Lesotho - PHAL.)

Services provided by MOHSW are usually organized within the ministry as either "line" or "staff" functions. The line functions provide services to the public while the staff functions provide services to ministry officials, other staff functional units, or the line functional units. The line units are organized vertically for control from top to bottom within the system, while staff units are organized horizontally and function across the system. The ministry exercises its control directly through the vertical line of authority and indirectly through its staff units. The staff units, (or Administration Units) therefore, also exercise considerable control and authority over what we do from day to day. These staff units are sub-systems of the overall health care delivery system. We should be aware of how these units function.

Since staff units of the Ministry are usually far removed from our daily activities, we are not usually aware of them until something goes wrong. Because things do go wrong at times, it is helpful to know the function and relationship of these staff units to us and how each functions as a sub-system within the larger system.

The present organization of the Ministry of Health is as shown in the following diagram:
A general characteristic of staff type service sub-system is that these systems are government wide in scope. Organized according to special function, such as finance, transport, communications, etc., these sub-systems may be ministries in their own right. In providing services to all other ministries, such as the Ministry of Health and Social Welfare, the Ministry of Education, the Ministry of Agriculture, etc., there is an opportunity to exercise control over distribution of common resources such as personnel, equipment and supplies. These staff support sub-systems which exist at the national level of ministries function at the ministry level, within each ministry, by seconding staff to the ministry, for example from Cabinet (Personnel) and Cabinet (Finance). Organized in this way, these sub-systems are responsible to the individual ministry, and to its own ministry.

As shown on the diagram depicting the Ministry of Health organization, the major staff sub-systems are:

1. Training
2. Financial Management
3. Personnel Management
4. Transportation and Maintenance
5. Communications
6. Drug and Medical supply
7. Planning and Statistics

We will examine each of these sub-systems in considerable detail later in this training programme.
C) ESSENTIAL SERVICES

There are basic essential services which must be provided as an integral part of our health care delivery system. These services are:

1. Health education
2. Nutrition promotion
3. Sanitation and safe water
4. Maternal and child health services
5. Family planning services
6. Immunizations
7. Prevention and control of endemic disease
8. Treatment of common diseases and injuries
9. Provision of essential drugs

The health services delivery system is organized to direct and control the activities of individuals in provision of health care services. The system is organized to do this in the most direct way.

The new Lesotho design incorporates responsibility for coordination.

This design provides a means of coordinating the provision of these basic services. The three tiered PHC design is diagramed below:
EXERCISE 3 - THE SYSTEMS APPROACH

STEP ONE

We can now see there are several elements of the management process which are inter-related and inter-dependent sub-systems. This view of the health services delivery system is what is spoken of as the "systems approach." As we examine additional sub-systems in greater detail, the concept will be even more apparent. This way of thinking, this perspective or approach, is essential to being a leader and good manager because taking a systems approach is fundamental to management. We must view the individual sub-systems of the Health Services Delivery System as parts of the whole and how they relate to the whole, and to each other.

The systems approach is reflected in all life and activities around us. What is happening around us and the environment in which we must work. The systems approach helps us to clearly see the inter-relationships between people and activities, the constraints within which we must work and the opportunities to be more effective.

We have already been thoroughly exposed to the systems approach in developing our knowledge of the body and of illness. For instance, we have learned that the human organism consists of many sub-systems, including the nervous system, skeletal system, respiratory system, circulatory system and endocrine system. We have learned that these sub-systems of the human body are all inter-related and interdependent, and that if one system mal-functions, it adversely affects the other systems. We should also be aware that one person in a team can adversely or favourably affect another person in the same team because they are both functioning as sub-systems within a larger system.

To be a good manager, we must be able to apply this simple truth (the systems approach) to everything we do in planning work, performing work, and evaluating work. The people we will be serving and the people we will be working with are all interrelated and interdependent.
The traditional method of understanding and describing the health services delivery system is by use of an organizational chart. A simplified organization chart for the Ministry of Health and Social Welfare is provided (page ___) as an example of this traditional approach. While this chart indicates lines of authority and command, it does not indicate the interrelationships among the various parts of the Ministry. A new type of systems organization chart would indicate the interrelationships. The next step (step 2) of this exercise requires that we draw a systems organization chart which will show the interrelationships among parts of the MOHSW.
STEP TWO - COMPLETING WORKSHEET 3

Instructions: A copy of Worksheet 3A is provided. Utilizing information contained in the simplified traditional organization chart of Ministry of Health provided on the next page, let us draw a systems organization chart. For guidance and assistance, the following example is given.

Traditional Chart

```
Human Body
   /\   /
 Nerves / \ Skeleton / \ Blood Vessels
  /   \     /   \       /   \   
 Lungs Stomach Intestines
```

Systems Chart

```
Nervous System
   /\     /
 Circulatory System /   \ Skeletal System /   
   \   /     \       \   /
 Digestive System \     \ Respiratory System \ 
```

We should now complete Worksheet 3A.
**WORKSHEET 3**

**A SYSTEMS ORGANISATION CHART**

*INSTRUCTIONS:* Draw a simplified systems organisation chart of the Ministry of Health from information provided on the Simplified Traditional Organisation Chart. Refer to the simplified example given on human body systems.
STEP THREE

EXCHANGE AND GRADE PAPERS, AND CLASS DISCUSSION

Instruction: Exchange Worksheet 3 A with another class member. A Tutor will review how the systems organization chart should have been drawn and procedures for grading the Worksheet.

Worksheet 3A should then be returned to the originator, at which time any questions or comments may be discussed.
D) PROVISION OF SERVICES

In addition to nurse clinician at the local level, treatment and preventive health services are provided by public health nurses and other practitioners. Other personnel working in hospitals and their out-patient departments, provide services in the larger towns. Specialized services are centralized directly under the MOHSW. Health care services are provided at all levels of the system by a variety of providers, many of whom are employed by the government.

Most of the services provided by government are organized vertically and work independently under the direction of a service chief. Providing services throughout the country, these vertically organized service units function as specialized sub-systems, within the Health Services Delivery System. Responsibility for coordination of these service activities is usually placed in the office of the District Medical Officer.

These services are provided by the following sub-systems:

- Hospital services
- Family Health (MCH, Child spacing, Community Health Education)
- Public Health Nursing
- Disease control (Communicable diseases, EPI, Environmental Health)
- Laboratory services
- Social services
- Mental Health services

The staff of these service divisions provide essential health services throughout the country.

HOSPITAL SERVICES

The objectives of the hospital services sub-system is to provide curative procedures involving medical care and/or surgical intervention. Hospitals are organized, staffed, and equipped to provide specialized care. The General Clinic and Casualty services provide primary care and treatment of routine illness and trauma.
Hospitals are provided by the government at national and
district levels. Eight private hospitals exist which
provide services similar to those provided by the government.
Hospitals vary in size according to the location, type of
specialized services and other functions of the hospital.

The largest hospital, Queen Elizabeth II in Maseru, is
the most specialized. It consumes almost half of the
national budget for health.

There are eight other district hospitals situated in the
district towns. These range in size from 55 to 120 beds.
District hospitals serve numbers of patients referred from
clinics and health centres. Appropriately used, hospitals
are a very important part of the health care delivery system.

Except in a few diseases (which you will be learning about),
hospital care and treatment should only be provided and used
as a last resort. Although district hospitals are less
costly to operate than Queen Elizabeth II, they too absorb
a large share of the national budget for health. The
hospital services sub-system is the most costly part of
the entire health services delivery system.

The role of the hospital services sub-system is to provide
specialized services to people who must have these services.
Persons with disease or affliction which can be treated and
clinically managed outside of the hospital should be cared
for in the community. When diagnosis, care or treatment
is beyond the scope of local practitioners or services,
then it may be necessary to refer the person to the hospital.
Only those persons who absolutely require these specialized
service should be referred to the hospital. There is a
referral procedure for these purposes, as these services
are in addition to those provided in the community, but do
not duplicate them.

There are nearly a hundred clinics, health centres and out-
station dispensaries in Lesotho. Approximately one third
of these are operated by the MOHSW, and the rest by various
private organizations.

The Lesotho Flying Doctor Service (LFDS) serves 10 clinics
isolated in mountain areas. Using aircraft chartered from
Mission Aviation Fellowship, the Flying Doctor and a public
health nurse visit each clinic twice a month. Visits are
so scheduled that the public health nurse does not accompany
the doctor to the clinics he visits, but goes to others
where she supervises the under-fives clinic activities, such
as weighing and charting of children's progress, health
education, and immunization.
On average the Flying Doctor sees 70 - 100 patients per clinic per visit, many of whom were seen by the resident nurse in the period between the doctor's visits. Referrals to the doctor include women with complications of pregnancy and first attendances for contraceptive advice.

LFDS participates in pilot schemes to train village health workers in cooperation with resident nurses at clinics and resident health assistants.

Each of the clinics served by LFDS is in communication with the Maseru base by radio.

**MATERNAL AND CHILD HEALTH**

The objectives of the Maternal and Child Health services is life-long health for the community through adequate care for mothers and children. This sub-system is primarily involved in planning, advising, helping to initiate and then monitoring and evaluating maternal and child health services.

The Maternal and Child Health staff at the national level are responsible in general for:

- Providing guidelines and procedures.
- Giving advice on programmes or projects.
- Development of cooperate programmes with other sub-systems.
- Evaluation of services provided.

This sub-system relies upon other sub-systems to deliver its services. For the most part, these services are provided by public health nurses, health centres, clinics and hospitals. As a nurse clinician, we are expected to assist in integration of these services at the local level. It is also expected that we will work with the community to provide these services if they do not exist in the community.

Specific services provided by the Maternal and Child Health sub-systems are:
ANTENATAL CARE

The antenatal care provided includes screening for abnormalities, routine prenatal health checks and referral to hospital for complications. Laboratory examinations and medications are available for minor ailments.

POSTNATAL CARE

Lack of adequate postnatal care creates a big gap in maternal care. This service is offered at hospitals, health centres and clinics. High risk mothers are offered advice and/or contraceptives at these centres. Unfortunately too small a proportion of new mothers take advantage of this service.

INFANT AND PRE-SCHOOL CARE

Regular clinics for under fives are held at most health centres and health stations throughout the country, except in remote areas. Services provided include medical screening, immunization, nutrition and supplemental feeding. Routine medications such as iron, vitamins, and medicine for minor ailments may be available.

SCHOOL HEALTH

School health services should be provided throughout the school system. The children are screened and treated for minor ailments, and immunizations are given. Sick children are referred for treatment.
The objectives of the community health education sub-system is to ensure that educational needs of the public on health matters are met. This sub-system encourages the adoption of positive attitudes, behavior, or practices from individuals and communities. In addition to providing services directly to the public, programmes are developed for use of all health workers, teachers, communications media and others in a position to influence good health practices. Each health worker is expected to be a health educator in the communities where we work.

The specific functions of the health education sub-system are divided into four components:

COMMUNITY ANALYSIS

We must learn from the community members what they believe the health problems of the community are. This can be done in both a formal or informal survey. In the process of analyzing the community, we begin to discover the attitudes and socioeconomic aspects of the community. This provides us with a basis for developing a programme of community education.
INFORMATION

The needs of the population for information about health care must be recognized and met. Materials must be prepared, produced and distributed to provide information on various health topics. Relevant data must be interpreted and presented in a meaningful form. The appropriate media should be used.

COMMUNITY ORGANIZATION

Health education activities in the community must be organized with involvement of field health workers, members of the community and health education workers. These programmes may be initiated by the Health Education Division or at the request of other health workers. Planning and implementation of community health education programmes are cooperative efforts.

TRAINING

Training in education and communication skills must be provided to others who may be responsible for provision of health information training. The Health Education Division is responsible for organizing this training.

CHILD SPACING

Responsibility for family planning is shared by the postnatal services provided by the Maternal and Child Health sub-system and other designated health workers. In addition to those services provided in hospitals, clinics and public health nursing, the nurse clinicians are expected to provide these services routinely.

The 1979 National Conference on Population Management passed a number of resolutions, including the following:
CONFERENCE RESOLUTIONS

Resolution 1

Having studied and considered closely the current Lesotho demographic trends in comparison with other countries of Southern Africa, the current economic growth rate of Lesotho, the current growth rates of the social services and the current and projected food requirements, this Conference resolves that Lesotho's population growth rate should be controlled to bring it into pace with its economic growth rate.

Resolution 2

Recognizing the fact that family planning is not a new concept or practice of the Basotho, and further that family planning is of great help and therefore a necessity for individual families and to the nation, this Conference resolves that family planning is acceptable as one of the major ways of controlling population growth and improving the quality of life and thus:

a. Population and family planning education should be integrated into all educational programmes in Lesotho.

b. Family Planning services be integrated into all basic health services in all health institutions.

Resolution 10

This Conference recognising its wide spectrum of representation a spectrum that reflects on the national population itself; recognizing the democratic policies of the Government of Lesotho; recognising Lesotho's commitment to the U.N. Resolution on the freedom of the individual family to decide on the number of the children they want to raise and the spacing thereof; recognising customary, religious and other factors within the population; urges Government to ensure the availability of all scientifically proven methods of Family Planning in the country in collaboration with churches and other voluntary organizations in order to enable people of different persuasions to make a free choice of method.

That all institutions that deal with Family Planning must be regularly inspected by Government medical personnel to ensure proper standards and safety of the people.

Child spacing is an official policy of the Government of Lesotho.
PUBLIC HEALTH NURSING

Public Health Nursing services are provided in each district. A wide range of services are provided through this sub-system which include preventive diagnostic and treatment, and rehabilitative services.

PREVENTION AND CONTROL OF COMMUNICABLE DISEASE

This sub-system has, as its objective, the eradication or control of diseases which are prevalent in the country. Special programmes are provided at the national level to address these problems on a country wide basis.

EPIDEMIOLOGY

Centralized supportive services are provided by the government in support of the various sub-systems involved in the control of communicable disease. The services provided include analysis and planning, programme monitoring and evaluation, and provision of advisory services. Specific services provided include:

- Planning programmes for implementation and evaluation of:
  - Immunization programmes
  - Communicable disease research and field trials
  - Education and training programmes
  - Epidemiological surveillance
  - Public information programmes.

IMMUNIZATION PROGRAMMES

The objectives of the immunization sub-system is to prevent and/or reduce the spread of childhood communicable diseases which may be controlled by these means.

Immunization services are provided by public health nurses, health centres, clinics and hospitals throughout the country where such facilities exist.
Expanded Immunization Programme (EPI)

This programme, ongoing since 1978, concentrates largely on children under two. EPI headquarters, the district public health nurses, and all health institutions cooperate in the distribution, storage, and use of vaccines. As the strategy of primary health care is progressively implemented, the level of immunity in the community as a whole is expected to reach 75 - 80 per cent and common diseases can be expected to die out; this is already effectively true in the case of smallpox. Specific objectives in the Third Plan period are to immunize 50 per cent of children under one against poliomyelitis, diphtheria, tetanus and whooping cough, 80 per cent of children under one year against tuberculosis, 30 per cent of those between 9 and 23 months against measles, and new school entrants (about 45,000 children a year) against tuberculosis.

The mode of operation is a combination of fixed and mobile immunization teams with careful supervision and evaluation. The first step was a review of existing immunization programmes and an identification of requirements. Procurement, storage, and distribution of supplies will be rationalized. Recruitment and training of staff will be organized, as will the supervision, registration and reporting systems. Instructions and manuals will be reviewed and revised as necessary. Health education will be reinforced in order to enlist the cooperation of the community. The programme will be implemented first in one or two districts and thereafter extended to the whole of the country.

ENVIRONMENTAL HEALTH

The objective of this sub-system is to provide protection for the population from diseases caused by a poor environment. Included in this responsibility is sanitation and control of disease related to the environment. Field services are provided by public health inspectors and health assistants under supervision of Chief Public Health Inspectors. The services may vary depending on the locale and the responsibilities assigned to local government authorities. As a minimum, these services include simple sanitation such as protection of wells, waste disposal, food protection and vector/vermin control.
EDUCATION

Health education plays a vital part in the role of the health inspector and health assistant. Where possible, the health inspectors should work directly with the nurse clinician, other health workers, teachers and community organizers. This cooperative effort is necessary because many rural areas do not have assigned sanitarians. In this way, people are informed about sanitation, safe food production, and proper storage of food.

INSPECTION SERVICES

Routine inspections are made of food industrial establishments, and other public places. Meat and food are inspected.

WASTE DISPOSAL

The control of human and other wastes is one of the most important aspects of the sanitations sub-system. Especially important are those activities which concern the demonstration of construction of water supplies and pit latrines in the villages. This task must be accomplished at the local level in communities dispersed throughout the country.

WATER SUPPLIES

One of the most serious and difficult problems faced by the sanitation sub-system is provision of safe water supplies in the rural areas. This is a world wide problem which is addressed in each community by local health workers using such means as are locally available. The availability of safe water is basic to good health. These problems will be addressed by the nurse clinician in the course of the services which we provide in the community.

LABORATORIES

There is a central laboratory service organized within the Ministry of Health. Routine services and some special laboratory procedures are done under supervision at the District hospitals.

The laboratory at Queen Elizabeth II hospital does more sophisticated procedures and serves as the national referral laboratory.
SOCIAL SERVICES

MOHSW has established a unit of social services and is recruiting for a qualified social worker to be based in Maseru. This service is also to liaise with voluntary agencies offering social services.

MENTAL HEALTH SERVICES

Lesotho's mental health services are considered to be among the best in Africa. Each district hospital has a mental observation unit of 16-20 beds, which are supervised from the Mohlomi Mental Hospital. Mohlomi was completed in 1965 and has 120 beds.

E) PRIVATE HEALTH ASSOCIATION OF LESOTHO

Eight of the seventeen hospitals in Lesotho and more than half of the clinics are associated with PHAL. PHAL developed from an informal Mission Hospitals Association in 1974. This development has been with the strong support of MOHSW. Its purpose is to encourage coordination and cooperation among its members and between them and the Government of Lesotho so as to help improve the health status of the people of Lesotho. Members include the following missions: Anglican, Assemblies, Lesotho Evangelical, Lesotho Methodist, Roman Catholic and Seventh-day Adventist.
UNIT III REVIEW QUESTIONS

1. An overview of the health services delivery system can help us understand _____________________.

2. The Ministry of Health and Social Welfare (MOHSW) is responsible to _____________________.

3. The MOHSW has both line and staff functions. The ____________________ provide direct services to the public and the ____________________ provide support services to those giving the direct services.

4. The three tiered Primary Health Care design is diagramed:

5. The coordinating organization for non-government hospitals and clinics is _____________________.

Primary Health Care is the maintenance of health, prevention of illness and the treatment of illness when it does occur. Such care is provided by a person who is the first (primary) person to provide health care for the well-being of another person.

Primary health care begins in the home with the family. The family is closely concerned about the well-being of its members. It cares for its young until they can stand on their own feet. It cares for the old after they are no longer able to work as they did for years.
In other words, the family is the primary and closest social unit and it has the well-being of its members which is of common concern. This common concern often extends to the village or the community - we will talk about this a little later.

The family unit has existed for centuries and with it its own ideas of care (in terms of promotive, preventive, and curative) for the well-being of its members. The basic idea of primary health care is found here - the birth, the care of the young, the food and dress, care of the ill and the old. Most of these ideas have developed over centuries of trial and error and in harmony with the surroundings within which people live. Through this process of trial and error basic traditional health care was born. Any changes to this pattern which is the foundation of Primary Health Care affect the delicate balance that has existed for centuries. The Primary Health Care programme must be able to join traditional wisdom and new knowledge and develop appropriately for the particular society.

During the past few centuries many changes have occurred that have affected traditional health care. Some of these changes have been the movement of people from one place to another, the centralization of government from villages to national government, the development of 'modern medicine' and many others. As a result of these changes traditional wisdom has been somewhat lost and new methods have either not been appropriate or have failed to reach many parts of the rural areas. Adequate care for people suffering from many preventable illnesses has not been provided. The most common illnesses that people suffered and are suffering from today are diseases which continue to be spread easily from person to person, diseases of pregnancy and childbirth and undernutrition. When curative and preventive care has helped lower death rates, little attention has been given to child spacing so that with the same number being born and fewer dying, the population has grown faster than the land available, leading to hunger and poverty - both of which are harmful to health.

The Government of Lesotho is committed to providing health services to all the people especially those in the rural areas. Despite the past and current efforts, many rural areas have not had adequate access to health care. MOHSW expenditures have been concentrated on curative hospital care - 88% of MOHSW operating funds have been allocated to hospitals.
It has also been found that even where health facilities are available, many rural people seeking health care do not go to these facilities, or if they do, go only when their sickness has become desperate. This lack of use of health facilities or use of them at a very late stage of disease is, however, most often because of the lack of availability of the health facilities.

Health facilities are not often used by rural people for many reasons. The most important reason is that the health facilities have developed independently from the traditional health care system in the rural areas. There are far more traditional healers in Lesotho than doctors, nurses and all other health workers combined. Since the people to be served were not consulted in the development of these services, the services available were not responsive to the needs of these people. Health facilities were developed in a way that required the people to come to them if they needed health care. The idea of health care seldom went further into the community than the walls of the clinic or health centre. Only those who were ill received care. Out of those who were ill, only those who came to the clinic received care. This favoured the development of curative services but the promotive, preventive aspects of health care were overlooked. The patient was an individual suffering from a disease; its spread within the community was of secondary concern. Special services for preventive or promotive care such as immunizations and MCH developed, but they were often separate from the rest of health care, almost always clinic based and often developed without consulting the people to be served.

Government resources are also limited and many of the trained medical and health personnel have moved to the urban areas leaving the rural areas with inadequate health services.

The idea of Primary Health Care developed as a result of the felt need to change the situation. Primary Health Care Programmes aim to address some of these problems. One of its main characteristics is the development of services that are responsive to the needs of the people, especially in the rural areas.

A Primary Health Care Programme is a Government commitment to provide essential health services fairly to all its people by the active participation of the people in the planning and delivery of these services. Primary Health Care Programme includes promotive, preventive and essential curative services with easy access to all the people through three levels of personnel: Doctors, Nurse Clinicians and Village Health Worker.
The essential health services that a Primary Health Care Programme can provide may differ from country to country depending on the common health problems and the resources available to the Government to address these problems. In our country the essential services include:

- maternal and child care
- immunization against major infectious diseases
- promotion of adequate nutrition
- adequate supply of safe water
- basic sanitation
- prevention and control of diseases that have permanently affected people in the country like tuberculosis
- education concerning health problems and methods of preventing and controlling them
- appropriate treatment for common disease and injuries

Government commitment and people's participation are the two keys for the success of a Primary Health Care Programme. The success of the programme depends largely on the combined and best use of the Government, Private and community resources.

Most governments have been searching for alternative methods to extend basic health services to people in the rural areas and to address some of the problems related to the delivery of the health services.

Some experiments have been tried in the past. Initially the construction of rural clinics and health centres was seen as the answer to the problem of coverage. Nurses were assigned to these health centres but without needed additional training for work out of the hospital setting or for diagnosis, treatment and prevention. Regular supervision and referral of patients was difficult to maintain. Experiments or pilot projects in Lesotho as in other countries highlighted some other problems. Some solutions were suggested by these experiments:

- integration of public health and medical services
- revision of recording and reporting system
- a system for referring patients between rural health centres and district hospitals
- development of contact with the community
- provision of primary health care services by someone living in the community.
Other pilot schemes have tried to address problems met in earlier experiments and apply some of the suggested solutions. Lesotho has had a number of varying schemes involving village level workers selected by the community to care for simple health needs within the community. As well as providing more experience, these experimental programmes raised some more important issues and problems. The most important among them was the need for some type of worker to continually train, supervise and guide the village health workers. The need to train traditional health personnel like traditional birth attendants or practitioners in some modern health care techniques was also seen as most useful. It was seen that training traditional health personnel would help to combine community and government resources. It would also help the community accept new methods and knowledge about health problems.

The idea of Primary Health Care has developed out of experiences of past projects. Some of the basic parts of a Primary Health Programme are:

i) Training of Village Health Workers (VHWs) for every community.

ii) Training of Nurse Clinicians (NC) for every clinic. NC can train, supervise and guide VHW and would receive patients referred by the VHWs.

iii) The greater integration of public health and medical services.

By understanding the general concept of the health system you can see your new role of the Nurse Clinician in the system.

General Concept of the System

1. The health service delivery system in a community is a partnership among the Government, semi-private, and private agencies, with a strong support from the community.

2. The Government is represented in the country-side by the clinic or health centre which must function in coordination with other types of agencies and provide the leadership in the community health work:
   a. Preventive and promotive health activities.
   b. Provision of basic medical services

3. Local Village Health Workers form a vital link between the Government and private health services and the community:
They assist in involving the community in health care
b. Case reporting
c. Sanitation and nutrition activities
d. Health education
e. Simple/common illness care
f. Other activities
g. Referral

Framework of Primary Health Care Programme

a. Family - as discussed earlier, the family is the first unit within which the first level of care is provided.
b. VHW - as discussed, the link between the village and the health care system.
c. Basic (Rural) Health Centre (Unit) - Government or Private.
d. District Government Hospital or Private Hospital (HSA hospital).
e. Central (Referral Hospital (Queen Elizabeth II Hospital))

A patient is first cared by the family

↓ Village Health Worker

↓ Clinic or Health Centre

↓ HSA or

↓ District Hospital

↓ Central Hospital
Basic Health Centre Structure

The basic health services are envisioned to be expanded.

So: A group of communities with an average population of 5,000 - 20,000 will be served by a clinic or health centre staffed by a nurse clinician who, in addition to being a dual qualified nurse/midwife, has been trained in treatment of common ailments and in identification and referral of more serious ones to the HSA hospital. (These clinics or health centres therefore serve as the primary level of health care where all patients are referred either directly by the family or by VHWs to their initial contact with trained health care workers.)

Cases which cannot be handled are referred to HSA hospitals to be attended by the M.O.

In the field of sanitation, the referral procedure is from NC to the sanitary inspector.

Where does the VHW fit into this restructured system? The VHW is an extension arm of the clinic and is therefore placed under the training, supervision, and guidance of the NC. Therefore, the VHW, especially in areas away from the clinic, becomes the first level of primary care. The VHW refers to NC.

Thus through the presence of VHWs, the services are brought closer or into the community and the family and are made more responsive to the people whom they are to serve.

Health services for Primary Health Care are more than providing hospitals, health centres and medicines. Even with all these, basic health needs of the people can and will remain unmet. These health services seldom reach those most in need. Health services tend to be available only to a few people living near the hospital or clinic or groups who have special influence. This is very different from our understanding of primary health care which we have referred to as "providing essential services fairly to all people . . ." When we talk about the involvement or participation of the community, we must make sure that it does not only mean that primary health care services will only reach the same people who have been the main beneficiaries in the past.

Community participation in primary health care implies the involvement of people from all sections within the community in the process irrespective of their social, economic, political, religious or cultural background.
It is often people with lesser power socially or economically who have the greatest need for primary health care services. Only by our ability to involve all the people in the process of planning and delivery, will we achieve the main aim of providing health care for all.

This does not mean that the existing community organisation is to be ignored. In fact quite the opposite. What is essential though is that we keep our objective clearly in mind and be able to involve all sections within the community in the decision-making process. This is important because decisions made influence the whole community and not just a few people.

The community, its people and their health problems and needs are central to Primary Health Care. Health services and its administrative mechanisms are merely means to achieve the ends of primary health care. Most of the primary health care activities will take place within the community. Without community involvement, primary health care cannot exist.
UNIT IV REVIEW QUESTIONS

1. Primary Health Care is ________________________, ______________________ and ______________________.

2. Primary Health Care begins ______________________ with ______________________.

3. Primary Health Care must be able to join _______ and ______________________.

4. Curative and preventive medicine without _______ leads to rapid population growth, hunger and poverty.

5. Most health care money has been allocated to ______________________.

6. The two keys to success of Primary Health Care are ______________________ and ______________________.

7. Health services are brought to the community through the presence of ______________________.

8. The important work of the nurse clinician in relation to VHW is to _______ and _______ them.
As noted in the introduction to this module, a N.C. is a new position for Lesotho. The need has existed for a long time. Clinics and communities have needed someone to make health care available to them. Over the years, people have tried to meet their need. All of you have spent time in rural areas trying to help meet the need. Some of you have been involved in VHW programmes around your clinics because you saw the need to have VHWs to work with you. But none of you were trained specifically to work in the rural areas. The type of situations and problems you meet in rural clinics is, as you know from your experiences, much different from what is seen at the nursing school or even at the smaller hospitals. As you spend more of your time in the communities themselves, you will find the situations there differ also from those in the clinics.

Therefore, although you have had good training in the past, it has not been specific for the type of work you as a NC will be doing. Doctors are trained to do a specific job. Nurses are trained to do another specific job. Public Health Nurses are trained to do yet another specific job. You as NC's are being trained to do a unique job. Your training has been specifically designed here in Lesotho. You are not being trained to work in hospitals anywhere. Others can do that. You are not being trained to work in clinics in Botswana. The diseases and health care systems are different in every other country. You are being trained to work in clinics and communities in Lesotho. No one else can do that.
EXERCISE 4

One of your first responsibilities may be to explain the concept of Primary Health Care to your fellow health workers - nurses, doctors and others. This exercise will give you practice.

STEP 1 - Form into groups of three each. One member of each group assumes the role of nurse clinician explaining the concept of Primary Health Care and the role of nurse clinician in making it work. A second member assumes the role of a fellow health professional (Medical Officer, Matron, nurse, etc.). The third member serves as observer. Discussion should last for 5 minutes.

STEP 2 - The "observer" leads the small group in a discussion of the presentation.

STEP 3 - Repeat steps 1 and 2 twice rotating the roles.

STEP 4 - Class discussion of the small group presentations trying to summarize and determine the most effective way of presenting the concept.
WORKING AS A TEAM

You are not expected to take care of all of the health problems of Lesotho all by yourself. Even if you tried, the amount and variety of work would be impossible. One of the things you will be learning is what other health care workers are trained to do and how you and they can cooperate to do the most good for the people who need it. Only by working together can we bring needed care to all. You will learn more about how to get the most good out of working as a team in the coming weeks.

WHAT IS THE JOB OF A NURSE CLINICIAN?

Following is the most recent job description for your new position, Nurse Clinician. It will change from time to time. That is important because as you work in the clinics and communities, the needs there will change. Thus your job will change little-by-little. If your job changes, then the description of that job must change also. Since NC training is based upon the job analysis, the job description must always reflect what the job is to be so that the NC training can prepare you for the job.

HOW WILL NURSE CLINICIAN TRAINING STAY UP-TO-DATE?

Perhaps you are wondering what will happen to you who are trained now when the job changes later and the training has to change to meet the new job. One of the terms you are going to be learning is "Continuing Education". C.E. means that you will never stop learning. As a NC you will be taught new procedures, new ways of meeting changing situations, the use of new medicines, etc. regularly. C.E. will be as much a part of your training as this basic one year course is. In order to keep your registration as a NC, you will be expected to learn from C.E. during every year. Thus your training will never get out of date.

JOB DESCRIPTION OF NURSE CLINICIAN

Functions, duties and responsibilities

1. Curative and clinical

   The nurse clinician will:

   a. Diagnose and treat 80-90% of the common medical problems presented to the clinics.

   b. Organize, conduct and evaluate:
1) Child health care services to identify high-risk children, to manage common ailments referred by the school system, and to give immunizations.

2) Prenatal, natal, post-natal services to manage the common problems of pregnancy and reproduction.

3) Family planning services.

2. Preventive

The nurse clinician will participate with PHN's, District Medical Officers, VHW, and the other health professionals to encourage improvement of health by health education through curative clinics and at the village level by:

a. Developing health education programmes on various topics, such as common illness and disease prevention, nutritional preventive care, environmental sanitation, health during pregnancy, etc.

b. Conducting family planning services for child spacing.

c. Conducting immunization programmes for disease prevention.

d. Developing a means to evaluate the health status of the community and implementing change.

3. Promotion

The nurse clinician will:

a. Conduct discussions (one-to-one, by home visits, and in small groups) to promote improvement of community environmental, nutritional and bodily health.

b. Train, supervise, and evaluate VHW.

4. Community

The nurse clinician will work with the VHW and the community to develop:

a. Communication systems

b. Emergency transport systems

c. Schemes for adequate domestic water supply

d. Schemes to safely dispose of human waste and solid waste

e. Schemes for community organization to solve health related problems.
5. Administration

The nurse clinician will:

a. Manage service areas of populations from 5,000 to 10,000 persons.

b. Organize and manage health facilities by:

1) Establishing the work site
   a. Choosing the facility for the clinic or adapting already existing structures and making sure that water is available, electricity (or alternate sources of energy) are available, and arranging for maintenance of the facility.
   b. Choosing sites for training VHWs.
   c. Choosing sites for community education.

2) Ordering, storing, rotating and replenishing all needed medical, drug, and miscellaneous supplies.

3) Developing and maintaining patient records.

4) Developing and maintaining financial records.

5) Developing a communication system and finding means to maintain it.

6) Developing a transportation system for carrying out clinic functions, supervising VHW's and providing an emergency transport system.

   c. Help to coordinate activities within the district and village level to develop the schemes for community.

6. Supervision

a. The nurse clinician will be supervised by the District Medical Officer and/or the Supervisory Nurse Clinician.

b. The nurse clinician will supervise the VHW.

QUALIFICATIONS

1. Graduation from MOH-recognized nurse clinician training programme.

2. Willingness to accept MOH assignment to selected locations and exercise required functions.

3. Willingness to accept supervision by District Medical Officer and/or Supervisory Nurse Clinician.
7. Overall Responsibilities
To guide, develop, and support all nursing and auxiliary health staff in her district at the village level.

8. Planning
1. Visit all health related centres in the district. These centres might include:
   a. Health centres in remote areas, dispensaries, out stations.
   b. Private practitioners of all kinds at the village level.
   c. Institutions for mentally, and physically handicapped at village level.
   d. Schools at village level.
   e. Training centres, (in remote areas, for nutrition, agriculture).
   f. Voluntary associations (women's groups etc.)
   g. Village authorities (chiefs, headment, pastors etc.).
2. Determine objectives and priorities of health services according to the health problems in the district, at the village level.
3. Coordinate health care plans with the total health and Social welfare programmes.

9. Organization
1. Develop work priorities, procedures, and recording system at the village level.
2. Establish routines for the various categories of staff, different areas of community health services in collaboration with the public health nurse, e.g. clinics, ante-natal, immunization, nutrition education, home visiting services.
3. Preparation of time schedule for clinics, home visits, (meetings, together with the public health nurse).
4. The nurse clinician will be responsible for her own supplies and equipment.
5. Establish working relationships with other departments and agencies, working together with the public health nurse.
6. Development of field experience of students. N.B. The nurse clinician tutor in conjunction with the nurse clinician/public health nurse in-charge of the area concerned will plan with the principal tutor/ in such matters, but the Nurse Clinician Tutor/Public Health Tutor will effect the experience.
7. Participation in professional activities, seminars, meetings, etc.

8. Supervision of voluntary organizations at the village level. Working under the direction of the health department.

10. Coordination with other Departments and Agencies

1. Working in close cooperation with government or mission hospitals in developing a referral system, between health centre and the hospital, keeping the hospitals informed of health programmes and advising or organization of MCH services.

2. Arranging referrals to specialized agencies (coordination with other health sectors needed).

3. Coordinate health service with special programmes e.g. immunization, campaigns, at village level, nutrition programmes, by department of agriculture etc.

4. Participate in training and orientation programmes of other agencies and departments.

5. Encourage the development of women's groups interested in MCH at the village level.

6. Stimulate voluntary groups to assist in the retrieval of defaulters from national control programmes e.g. the T.B.Control Service N.B. (at the village level).

11. Supervision and development of Staff

1. Work with health centre staff, work priorities, procedures and record systems.

2. Help staff or organize their work and establish routine for clinics, home visiting programme.

3. Supervision of health practice, reviewing nursing techniques, encouraging staff to assume responsibility for preventive health care.

4. Plan in service training and orientation programmes within the health centre. In collaboration with the public health nurse.

12. Evaluation

1. Establishment of a satisfactory record system that is understood and acceptable to health centre staff and provides the necessary data for evaluating services.
2. Teach health centre staff to make use of their records in evaluating services and in determining priorities and objectives.

3. Frequent review of nursing programmes in line with set priorities and objectives.

4. Monthly report to MOH indicating changes in staff development and achievements and analysis of problems, where there has been little progress.

HOW DOES A NURSE CLINICIAN RELATE TO A PUBLIC HEALTH NURSE?

Another type of health care worker has worked outside of the hospitals in the past. That is the Public Health Nurse. Please review the latest job description of the PHW so that you can discuss the different jobs that NC and PHW will do and how you will work together.

JOB DESCRIPTION OF PUBLIC HEALTH NURSE

The duties and responsibilities of the Public Health Nurse:

1. Overall Responsibilities

   a. To implement public health policy and interpret this policy to all staff.

   b. To participate with the district medical officer and district health inspector in the planning, organization and education of the public health programme.

   c. To coordinate public health nursing plans with those of other health and social services in this district. (i.e. Nurse Clinicians, Hospitals and Social Services).

   d. To guide, develop, and support all nursing and auxiliary health staff in her area working with health centres, dispensaries and in the community. N.B. (This will not apply to health centres run by nurse clinicians, since they will have their own supervisor.)

   e. To participate in public health aspects of training programmes, for nurses and paramedical staff.

   f. To participate in community health educations.
2. Planning

a. Visit health related units such as: Schools, Day Care Centres, institutions for Mentally and Physically Handicapped, Old age homes, Industrial Institutions.

b. Determine objectives and priorities of nursing care according to the health problems in the district, township only.

c. Coordinate health plans within the total health and social welfare programme, at the township levels.

3. Organization

a. Develop work priorities, procedures and recording systems for themselves.

b. Establish routines for the various categories of staff, different areas of community health service. N.B. (This will be effected in collaboration with the nurse clinician).

c. Preparation of time schedule for clinics, home visits, meetings, at the township level.

d. Provisions of her own supplies and equipment. N.B. (Nurse Clinician is responsible for her own supplies.)

e. Establish working relationships with other departments and agencies.

f. Development of field experience of students. N.B. (The Public Health Tutors in conjunction with either the Public Health Nurse or the nurse clinician in charge of the area concerned will plan with the Principal tutor in such matters, but the Public Health Nurse Tutor/Nurse Clinician Tutor will effect the experience.)

g. Participation in professional activities, seminars, meetings, etc.

h. Supervision of voluntary organizations working under the direction of the health department. (Working with nurse clinician if necessary.)

4. Coordination with other Departments and Agencies

a. Working in close cooperation with government or mission hospitals in developing a referral system, between health centre and the hospital, keeping the hospitals informed of health programmes.
b. Arranging referrals to specialized agencies  
(coordination with other health sectors needed).

c. Coordinate nursing service with special programmes.  
e.g. immunization campaign's, at village level,  
nutrition programmes, by department of agriculture  
etc.

d. Participate in training and orientation programmes  
of other agencies and departments.

e. Stimulate voluntary groups to assist in the  
retrieval of defaulters from national control pro-  
grammes; e.g. The T.B. Control Service (N.B. at  
the township level).

5. Supervision and Development of Staff

a. Frequent visits to institutions, e.g. day care  
centres, industries, hotels, old age homes, to  
observe and analyse work of the staff, discuss  
problems and advise how services can be improved.

b. Work with institutions staff priorities, procedures  
and record system.

c. Help staff to organize their work and establish  
routines for clinics, home visiting programmes  
of those clinics run by public health nurses.

d. Supervision of nursing practice, reviewing nursing  
techniques, encouraging staff to assume responsibility  
for preventive health care of those centres run by  
public health nurse.

e. Discuss with Health Centre Staff their work and  
professional problems and help to find solutions.

f. Plan in-service training and orientation programmes  
within the health centre. In collaborations with  
nurse clinicians.

6. Evaluation

a. Establishment of a satisfactory record system that  
is understood and acceptable to health centre staff,  
and provides the necessary data for evaluating  
services given (N.B. Centres run by Public Health  
Nurses only).

b. Teach health centre staff to make use of their  
record in evaluating their service and in deter-  
mining priorities and objectives.

c. Frequent review of nursing programmes in line with  
set priorities and objectives.

d. Monthly reports to MOH indicating changes in staff  
developments and achievements and analysis of  
problems where there has been little progress.
WHAT LAW SAYS A NURSE CLINICIAN CAN PRACTICE

In order to create a new health care worker such as the nurse clinician, it is necessary to make a law authorizing the nurse clinician to practice. Following is a copy of the new law:

PART VII THE NURSE CLINICIAN

This Act also hereby provides for the creation, definition and regulation of a primary health professional, the Nurse Clinician.

44. QUALIFICATIONS

A Nurse Clinician must be a qualified General Nurse and Midwife who has completed an advanced course of at least twelve months in length, that is approved by the Council, and who has demonstrated to the satisfaction of the Council that he/she is competent in the functions to be performed. A person not meeting these qualifications may not use the title of Nurse Clinician or undertake to perform or offer to perform for money or otherwise, these functions.

45. SCOPE

A Nurse Clinician may perform under prescribed supervision those functions in which he/she has demonstrated competence and in which he/she is able to demonstrate continuing proficiency from time to time as prescribed in the Rules and Regulations for Nurse Clinicians. (1)*

46. RELATIONSHIPS

The Nurse Clinician will at all times perform his/her expanded functions under the professional supervision of a Registered Medical Practitioner. She may work in conjunction with, and/or may supervise other Nurse Clinicians, Nurse-Midwives, and other health-related professionals and para-professionals as she is assigned.

47. SUPERVISION

(1) The Nurse Clinician shall be required to practise under the auspices of a health institution or facility which shall have satisfied the Council that it will provide adequate professional supervision of the Nurse Clinician.

(1)* Nurse Clinicians' Rules and Regulations, Supplement No. to Gazette No. of Legal Notice No. of 1980:
(2) The Council shall prescribe the extent of professional supervision under which a Nurse Clinician may practise.

(3) The Nurse Clinician shall be required to apply to the Council for approval of any transfer to a different Health Service Area.

48. TRAINING

The Council shall prescribe minimum standards for the training of Nurse Clinicians and may grant approval of specific courses for the training of Nurse Clinicians.

49. REGISTRATION

Registration of Nurse Clinicians shall be under the authority of the Council.

(1) Registration shall be on an annual basis with a fee to be prescribed by the Council.

(2) Rules and Regulations regarding maintenance of registration shall be determined by the Council.

50. COUNCIL MEMBER

At the implementation of this Act the position of the Nurse Clinician on the Lesotho Nursing Council shall be filled by a representative of the National Training Programme for Nurse Clinicians until the first Nurse Clinicians have been registered.

51. RULES

Rules for the implementation of this Act may be made by the Council with the approval of the Minister.

You should note several important things about this law. First, that it is a part of another law. What it is a part of is the Nurse Practice Act. That means that the Lesotho Nursing Council will be the group which will register you. But you will note that you as nurse clinician will have a special representative as part of the Council.
Second, you will note that only you, who have taken the nurse clinician course, will be allowed to call yourself a Nurse Clinician or to do the special work of a NC.

Third, you will note that you will be allowed to do the things that you have shown you can do. "Demonstrated Competence." That is when your Competency Based Training is important. But note that it says "continuing proficiency." That means you will be called upon regularly to show you can still do what you were trained to do. And that also increases the need for Continuing Education.

Finally, you will note that you will always practice under the auspices of a health institution or facility. That should guarantee that you will have available the professional supervision that you will need and want.

WHAT RULES GOVERN THE NURSE CLINICIAN

Since the Lesotho Nursing Council is responsible to register nurse clinicians, it will be making rules about your practice, your Continuing Education and your registration. Don't forget - you will have special representation on the Council.

RULES AND REGULATIONS FOR NURSE CLINICIANS

1. CONTINUING EDUCATION

(1) The Council shall prescribe the minimum amount of continuing education required for retention of the Clinician's name on the register of Nurse Clinicians.

(2) Continuing education shall be acceptable only as provided by sources approved for this purpose by the Council.

(3) The Council shall establish or at least approve procedures for the demonstration of continuing competence in the functions to be performed as well as in additional functions as competence in these shall be achieved.

HOW WILL PEOPLE KNOW A NURSE CLINICIAN WHEN THEY SEE ONE,

By now you probably already know the answer to this question. You can see your new uniforms are unique. No one else will have a uniform like yours. You can be proud of your new, unique uniform.
WELCOME

As this module began, so it ends. WELCOME. You are beginning something new. Your are NURSE CLINICIANS.
UNIT V  REVIEW QUESTIONS

True or False:

1. ___ The nurse clinician is a new position in Lesotho.
2. ___ The need for nurse clinicians is a new need.
3. ___ People have previously tried to meet the need which the nurse clinician will now fill.
4. What those who have previously tried to meet their need have lacked has been ____________________.
5. You are being trained to ____________________.
6. You will work with other health workers as part of a ____________________.
7. Since your job will change in the future, the way you will maintain your ability to do your job is through ____________________.
8. You will register as a nurse clinician through the ____________________ Council.
9. You will be allowed to do only those things that you have ____________________.
10. You will always practice under the auspices and supervision of a ____________________.