CONDITIONS

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FOREWORD TO THE ZEDAP MODULES

The Ministry of Health, through the Zimbabwe Essential Drugs Action Programme, has produced this module for use by primary health care workers in Zimbabwe. The module aims to provide the minimum necessary knowledge for a nurse at a primary care unit. This material may also be used for the training of other health workers.

The material is intended to be used in teaching and upgrading sessions as well as a reference manual.

These modules have been produced because when ZEDAP did a survey in all provinces in February 1987 we found that many primary care units had very few books. We also found that there was a desire by staff to upgrade their skills in a variety of areas.

The titles for these modules were selected on the basis of suggestions made during the baseline survey. A local expert with experience of working outside the central hospitals was asked to produce a draft for a particular subject.

The draft was then reviewed and rewritten by a special group of people. ZEDAP asked each province to nominate a different person for each review group. Each group included State Certified Nurses, State Registered Nurses and staff related to the subject under review.

While the group was reviewing the material they produced an amended draft which was field tested. After this a Draft 2 was produced. This Draft 2 was then widely circulated to all provinces, to people who had participated in the previous reviews and to the original author. All these people were asked to comment. The material was also reviewed by Dr. Felicity Savage, a WHO consultant who advised on the editing of the material.

The process is a dynamic one in which the users have been involved in defining the subjects and producing appropriate material. Now that the modules have been produced it is your chance to have an input.

If you have any comments please send them to:-

Zimbabwe Essential Drugs Action Programme,
P.O. Box 8168,
CAUSEWAY,
HARARE
ZIMBABWE.

You are free to copy any of this material and use it as you wish. If you wish to revise the material and have access to a microcomputer ZEDAP would be willing to copy the files for you. The material has been written with Microsoft Word and laid out with Xerox Ventura Programmes.

This is a new way of producing training materials. These modules have been produced in Zimbabwe, for Zimbabwe by Zimbabweans. The production process was generously supported by WHO and DANIDA.

New editions of these modules will be produced if ZEDAP receives enough comments and suggestions for revisions. ZEDAP looks forward to incorporating your ideas into future modules.

We hope you find these modules useful and that you enjoy reading them.

We look forward to hearing your comments!

CONTENTS CHRONIC MEDICAL CONDITIONS

CHRONIC DISEASES AND THEIR MANAGEMENT

INTRODUCTION

The purpose of this module is to give guidelines on management, follow-up and referral of patients with chronic diseases.

The chronic diseases, described in this manual are:-

1. Hypertension
2. Chronic Congestive Heart Failure
3. Asthma
4. Diabetes
5. Chronic Bronchitis
6. Epilepsy
7. Tuberculosis
8. Leprosy

The last two diseases are communicable. They have to be notified.

Chronic diseases require long term management. Treatment to give an acceptable standard of physical living is available. We must make every effort to give this to our patients.

We should make every effort to acknowledge our patient's disease and to respond to it, and to prevent him or her becoming worried by it.

Monthly follow up, maintenance of treatment and advice to the patient is very important.

Every Health centre should have a chronic disease register. The main advantages are to:

- Make sure you that know your patients, and follow them up on a regular basis.
- Determine your workload, the spread of the disease, the frequency of it, and the number of people that die from it.
- Make the patient feel that you are taking care of him or her.
- Identify drug needs for chronic patients.

You should deal with chronic patients whenever they come; the supermarket approach. However you may find that it is convenient for the health education talks, if you ask those patients with the same condition to come on the same day. If this is done you can give a general lecture to your patients before you see them individually and give them specific advice about their particular condition. Remember many of these patients have been on treatment for years and are experts in their own condition. If they say that they react to a drug don't give it to them. They won't take it! Some patients will not want to attend a group session; attend to them privately. Other patients enjoy such sessions and participate actively in the discussions. Start off with a hypertensive (BP) session and see how it goes!

INTRODUCTION TO CHRONIC DISEASES REGISTER

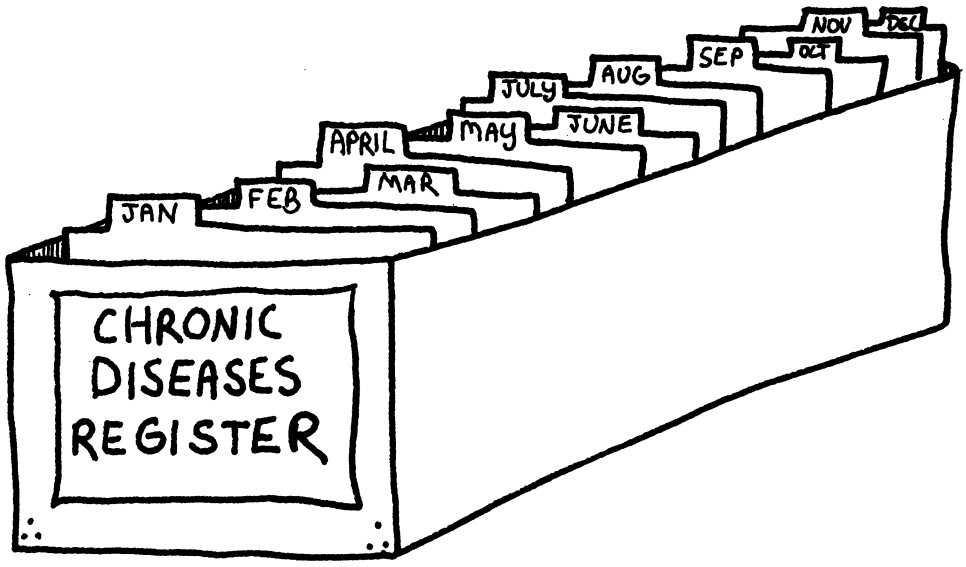
The chronic disease register is very important because you have to know who to follow-up, what disease the patient has, when to review him and who has defaulted. Secondly, the patient will know that he is in your register, and this convinces him to come for regular review.

YOUR CHRONIC DISEASES REGISTER AND HOW TO RUN IT

First there is the **Master card** for each patient which will be held at the Health Centre.

This card is very important because review dates will be entered on this card. It will tell you whether the patient is defaulting so that you can take appropriate action. It will tell you when you have to refer the patient for reassessment etc.
See P 27 for an example.

The best way to keep the master cards up to date, is to file them together in a box for the month when you will see them. At the month-end, you should have gone through all of them. If a few cards are left over, it means that those patients did not come, so that you have to trace them.



If a patient moves to another area, you can send the master card or give it to the patient to take to his new follow-up Health Centre.

Second there is the **Register book.**

Enter all patients with a chronic disease into the book. Arrange entries according to the type of disease and include all the necessary information. This information is filled in when first registered and is updated at each visit. The Register is also kept at the Health Centre. The information entered will tell you if there is improvement (or not) compared with previous reviews. See P 28/29 for an example.

Third, there is the **Outpatient card.**

Enter the essential information on the outpatient card and let the patient take it home. See P 30 for an example.

IMPORTANT:

- Follow up each patient on the Chronic Diseases Register every month.
- The Medical Officer should review all patients every 6 months if possible.
- Each month all information requested on the register is updated.
- If a patient defaults a Health Worker should trace him to find out why.

HYPERTENSION (HIGH BLOOD PRESSURE)

DEFINITION

Hypertension means blood pressure raised above normal values. The values depend on age, sex and race.

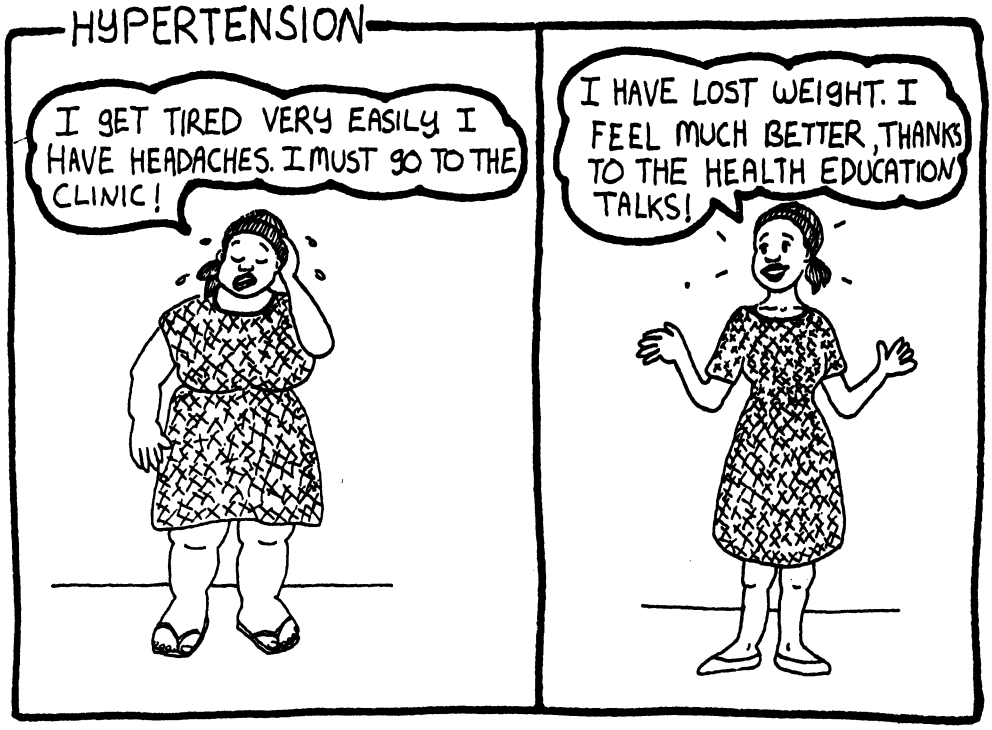
There are two types of hypertension.

1) Essential hypertension
   - unknown origin.
   - 95% of cases.

2) Secondary hypertension
   - secondary to other conditions (eg. renal disease or Pregnancy Induced Hypertension.
   - 5% of cases.

CONTRIBUTING FACTORS

- Heredity
- Salt intake
- Obesity (Overweight)
- Occupation
- Stress
- Smoking
- High fat diet
- Diabetes



Taking the blood pressure:

It is important to take the blood pressure in a relaxed patient. Let your patient rest for at least 15 minutes before you take the blood pressure. To take blood pressure wrap the BP cuff around the right upper arm. Feel for the pulse in the inner elbow. Inflate the cuff to 200 mm. Place the bell of the stethoscope over the place where you felt the pulse. Let the pressure in the BP machine down slowly. Note the pressure when you first hear a sound. This is the **systolic** blood pressure. Continue to let the pressure down as you listen. When the sounds go faint note the pressure again. This is the **diastolic** blood pressure.

STAGES OF HYPERTENSION

Levels of diastolic blood pressure have been established to define those who have increased risks.

Mild,	Diastolic pressure more than	100 mm Hg
Moderate	Diastolic pressure more than	110 mm Hg
Severe	Diastolic pressure more than	120 mm Hg
Malignant	Diastolic pressure more than	140 mm Hg

Systolic blood pressure is less important than diastolic pressure. But you would be more worried about a person with a blood pressure of 200/100 than a person with a blood pressure of 150/100.

SIGNS AND SYMPTOMS

A person with hypertension may have any or none of the symptoms below.

- Headache
- Dizziness
- Blurred vision
- Nose bleeds
- Palpitations
- Sharp chest pain (Angina Pectoris)
- Tiredness.

HISTORY

Ask about :

- Family history
- Headache
- Blurred vision
- Nose bleeds
- Chest pains

EXAMINATION

Measure the BP carefully after rest.

Look for

- Signs of CCF
- Oedema
- Ascites (fluid in the abdomen)
- Raised neck veins
- Enlarged liver

INVESTIGATION

Check for :

- Protein in urine
- Sugar in urine

HEALTH EDUCATION

- Diet - if obese, reduce weight
- Low salt diet (No added salt)
- Restriction of fats *(Musadye nyama ine mafuta)*
  (Lingahle inyama elamaphuta)
- Show the patient how to check for ankle oedema.
  Explain that if she finds it she should report immediately to health centre.
- Rest to be encouraged
- Advise on contraception, avoid the combined oral contraceptive (COC) pill.

Group discussion can be held with patients on the Chronic Disease Register.

TREATMENT

New patient with **mild raised BP** (diastolic over 100)
(without other clinical symptoms present)

Review patient weekly for 3 weeks.

If the BP is raised only on one occasion review BP monthly x 3 months.

If BP is raised on more than one occasion advise :

- Salt free diet for one week.
- Review after one week.
- If still raised start Hydrochlorothiazide (HCT) 25 mg daily.
- Review weekly for one month.
- If still raised add Reserpine 0,25 mg daily or bd for one month.
- If still raised **REFER.**

The Medical Officer should see any new patient on treatment when he next visits.

New patient with **moderate** or **severe** or **malignant hypertension**
(Diastolic over 110 mm Hg)

Give Hydrochlorothiazide 50 mg stat and REFER to hospital.

Chronic patient:

- Monthly check up by RHC staff.
- If diastolic pressure raised above 100 mm Hg refer to M.O.
  when he next visits.
- If diastolic BP above 110 mm Hg refer to hospital as above but
  continue previous treatment.

HEART FAILURE OR CHRONIC CONGESTIVE HEART DISEASE

DEFINITION

In heart failure the heart fails to pump blood fast enough for the body's needs.

Heart failure can be due to :

- Heart valve abnormality usually due to rheumatic heart disease
- Alcohol related heart disease.
- Circulatory congestion caused by salt and water retention.
- Non cardiac cause including shock.

HISTORY

(See History and Examination Module P9, 10)

Ask about:

- Productive cough especially if frothy
- Difficulty in breathing on exertion
- Difficulty in breathing while lying flat
- Ankle oedema
- General feeling of tiredness
- Nausea and loss of appetite

EXAMINATION

(See History and Examination Module P10, 11)

Look for:

- Rapid pulse (more than 90 min)
- Ankle oedema
- Enlargement of the liver
- Cyanosis (this is a late sign)
- Raised neck veins
- Ascites (Fluid in the abdomen).

MANAGEMENT

For a new patient

Give Hydrochlorthiazide (HCT) 25 or 50 mg/d and REFER.

Advise patient on discharge to come via the clinic so that you can register him and follow him up.

CHRONIC PATIENTS

If the patient on treatment worsens (eg. becomes more short of breath, neck veins become more distended, oedema becomes worse or the pulse more rapid) REFER TO HOSPITAL.

Rural Health Centre staff should review all CCF patients monthly. The Medical Officer should review 6 monthly if possible.

HEALTH EDUCATION

General

- Reduce physical activity and worries
- Rest

Diet

- Reduce weight
- Reduce salt

Family Planning

- Advise on family planning
- Avoid Combined Oral Contraceptive Pills
- No Intra-Uterine Device (loop) in Rheumatic Heart Disease.
- Suggest sterilization.

The patent may have been put on drugs at the hospital which you do not normally stock. These drugs all have side effects you should be aware of. Frusemide, a powerful diuretic, should always be given with Potassium chloride to prevent muscle weakness. Digoxin can cause slowing of the pulse, nausea or disturbed vision. If this happens, particularly the slow pulse, stop the Digoxin and REFER.

PROGNOSIS (OUTLOOK)

The prognosis depends on the underlying cause and the management. It is important to monitor the mild heart failure regularly to prevent the condition getting worse. Try to motivate the patient to come monthly for review at the RHC. Continuous reassurance is essential.

DIABETES MELLITUS (D.M.)

DEFINITION

Diabetes Mellitus is a disease in which the blood sugar is raised due to inadequate insulin.

CLASSIFICATION

Type 1: Insulin dependent

This can occur at any age.

There is a complete lack of insulin.

Type 2: Non insulin dependent

Mostly in adults and elderly.

There is a partial insulin deficiency.

Diabetes can also be due to the other factors eg. Drugs (Hydrochlorothiazide), chronic pancreatitis, obesity (overweight) and pregnancy.

HISTORY

Ask about :

Polydypsia (thirsty) Is he drinking more than before?

Polyuria. Is he passing more urine than before?)

Weight loss. Has he lost weight?

Increased appetite. Is there an increase in appetite?

EXAMINATION

Check for :

- Cataracts. A white cloudiness in the eye.
- Sores on feet

INVESTIGATIONS

- Urine sugar Multistix. Any sugar in the urine is abnormal and the patient should be referred
- Blood sugar Dextrostix

Normal value 60 - 100 mg/dl

Hypoglycaemia <40

Hyperglycaemia >130.

THINK ABOUT THE POSSIBILITY OF DIABETES IN ALL AGE GROUPS.

TREATMENT

If glucosuria is negative, and dextrostix less than 40 mg% give the treatment as outlined for hypoglycaemia.

Ketones - if ketones positive - REFER to hospital.

CHRONIC PATIENT

Monthly check ups are necessary.

Ask for:

- Any episodes of hypoglycaemia (feeling dizzy or sweaty). This may mean that the person is taking too much insulin.
- Any complaints?
- When did you take last insulin?

Check for:

- Glucosuria - Multistix
- Ketones - Multistix
- Hyperglycaemia - Dextrostix

WHEN A DIABETIC PATIENT COMES FOR REVIEW

1) If glucosuria is negative, do dextrostix.

   If dextrostix is normal continue the usual treatment.

2) If glucosuria is one plus, do dextrostix.

   If dextrostix is less than 175 mg (9.7 mmol 1l), continue the usual treatment, advise on diet, see doctor during visit.

3) If glucosuria is two plus or dextrostix is 175 or more, REFER to hospital.

4) If Ketone only is positive, REFER.

HEALTH EDUCATION

(See EDLIZ P.78.)

All diabetic patients need to understand their condition. Many diabetics become quite expert and our health education should support them in looking after themselves.

Give the following advice to all diabetics:

DIET

Do not add sugar to food.

Avoid foods containing sugar such as soft drinks like coca cola, fanta, honey, sweets, sugar cane, condensed milk, jam, Mazoe, ice cream, beer and alcohol).

Food containing carbohydrates such as bread, sweet potatoes, sadza, beans and mealies should be eaten at meals.

Foods which contain proteins should be promoted. These include fresh milk or lacto, fruit and vegetables, meat or fish, eggs or cheese, caterpillar).

A little oil/fat/margarine may be used in cooking.

Take 6 small meals instead of 3 meals.

Do not miss any meal.

Keep some sweets or sugar with you. If you feel dizzy or sweating this may mean the blood sugar is too low. If this happens suck 2 sweets or take 2 teaspoons of sugar, then eat some food.

If overweight, try to loose weight.

FOOT CARE

Keep feet clean and dry.

Do not walk barefoot.

Wear shoes that fit properly to avoid rubbing.

Do not put feet close to the fire.

CARE OF SYRINGES/INSULIN STORAGE

Syringes

- Disposable syringes are best.
- Re-use disposable syringes.
- Store disposable syringes dry.

Insulin storage

Store your Insulin in a cool place (preferably a refrigerator) at all times.

A clay pot covered with a damp cloth and kept in the coolest available place is suitable where there are no refrigeration facilities.

GENERAL ADVICE

If you do not feel well, attend the clinic.

Give yourself your insulin injection before your meal.

Give insulin at a regular time.

Have all injuries treated promptly.

Advise on family planning. Avoid Combined Oral Contraceptive.

Apply for Medical - Alert Bracelet - Box 689, Harare or make your own metal bracelet.

CHRONIC COMPLICATIONS OF DIABETES

Diabetes is a chronic disease and complications occur. When you see a new diabetic patient always check for common complications.

Look for:

Eyes :	Cataract, Retinopathy
Mouth:	Gingivitis, Decayed teeth
Pregnancy:	Death/big babies
Nervous system:	Neuritis, Muscle pain Loss of sensation in extremities (chronic ulcer).
Blood vessels:	Hardening of the arteries, Hypertension and heart failure
Infections:	Diabetics are more liable to infections.

OUTLOOK

The outlook for diabetes depends on the type of diabetes, the duration of the disease and how well controlled the disease is.

DIABETIC EMERGENCIES

A diabetic patient may present confused, comatose or even violent because of his illness. This happens when the blood sugar goes too low (Hypoglycaemia) or when it is too high (Hyperglycaemia). The patient with a low blood sugar is a more urgent emergency as the brain can be damaged.

HYPOGLYCAEMIA (LOW BLOOD SUGAR)

HISTORY

Ask about:

- *History of Diabetes and taking insulin.*
- *Missing a meal*
- *Alcohol ingestion*
- *Vomiting, Convulsion*

EXAMINATION

Look for:

- *Temperature - This is usually normal.*
- *Respiratory rate is usually fast*
- *The pupils are equal*
- *There is no neck rigidity*
- *Confused or abnormal behaviour or unconscious.*

INVESTIGATION

Check for:

- *Blood sugar (<45 mg%. or <2.5 mmol/l)*
- *Urine sugar -ve.*

MANAGEMENT

- *Give 20 mls of 50% Dextrose IV Stat.*
- *Repeat if the patient not waking up in 5 minutes.*
- *Give 1 Litre 5% Dextrose IV 4 hourly.*
- *Feed normally.*
- *Health Education - Taking diet in time*
  - Check dose of insulin
  - Avoid alcohol.

Refer if a rapid response does not occur. Try to find out the cause of the attack.

HYPERGLYCAEMIC COMA (DIABETIC COMA)

HISTORY

Ask about:

- *Onset over a few days.*
- *History of diabetes may be present.*
- *No H/O injury, Poisoning, alcoholism.*

EXAMINATION

Look for:

- *Pulse rapid*
- *Respiratory rate deep sighing.*
- *Smell of breath - sweet smell*
- *No neck rigidity.*

INVESTIGATION

Check for:

- *Blood sugar - more than 250 mg%.(13.9 mmol/litre)*
- *Urine sugar positive.*
  Acetone positive or negative.

MANAGEMENT

- *Start a drip with Ringer's Lactate. Give 1 litre hourly for 2 hours then 1 litre 4 hourly and REFER urgently to hospital.*

ASTHMA

See Acute Medical Conditions (P8).

DEFINITION

Asthma is a disease of airways with narrowing of the air passage. Patients have dyspnoea, wheezing and coughing.

It is a disease which comes and goes. Most attacks are short lived, lasting minutes to hours, and after that the patient seems to recover completely.

PREVALENCE

In childhood, asthma is more common in boys than girls.
Half of the cases develop before the age of 10.
Two-thirds develop before the age of 40.

Precipitating Factors:

- Allergens: pollen, freshly cut grain
- Environmental factors: polluted air (examples, cooking hut/industrial area) dust (working in the field)
- Seasonal factors: more frequent during rainy season
- Drugs: (Aspirin, Indomethacin) especially in children; the attack starts +- 2 hours after.
- Attacks may occur with emotional excitement.(funeral)

Sometimes a patient can avoid a known factor. Usually it is impossible to avoid them, and all that we can do is to minimise attacks.

SIGNS AND SYMPTOMS

The three most important symptoms are:

- Dyspnoea (difficulty in breathing)
- Cough
- Wheeze (laboured noise when breathing out).

A typical attack is characterised by:

- Sudden onset
- Tightness of chest
- Difficulty in breathing
- Coughing (trying to cough up sputum)
- Wheezing
- Fast breathing with prolonged expiration
- Flaring of the nostrils with breathing

The attack ends with the patient coughing up thick sputum.

BEWARE OF THE SEVERE ATTACK IN WHICH :
THE PATIENT IS UNABLE TO TALK AND
THE PATIENT CANNOT LIE FLAT.
THE WHEEZES DISAPPEAR.

Exclude the following conditions, especially in children:

- Foreign body swallowed
- Aspiration of fluids in babies
- Laryngitis
- Heart failure with bronchospasm

TREATMENT

If you know the cause of the asthmatic attack (e.g. animals, insecticides) it is important to advise the patient to remove the causative agent from his working or living environment. If this is not possible it may be necessary to change the occupation.

DRUGS USED FOR THE TREATMENT OF ASTHMA

In the past combination asthma drugs (eg Status Franol Asthma Co) have been used. These are no longer available and should be replaced with Ether Aminophylline or Salbutamol tablets.

Aminophylline

- Tablets 100 mg
  Dose 100 mg TDS
  Take the tablets on a full stomach.

- Ampoules :250 mg/ 10 ml
  Give IV diluted in 200 ml 1/2 Darrows/Dextrose

- Aminophylline is a dangerous drug if given IV too quickly since it does not only work on the bronchial dilating activity. It can cause severe tachycardia and even collapse.

Give **slowly** over 10 minutes.

DO NOT GIVE AMINOPHYLINE INTRAVENOUSLY AS A BOLUS ALWAYS DILUTE IN 150-200 ML AND GIVE OVER 10 MINUTES

Adrenaline:

- Ampoules 1 mg / 1 ml 1.1000
  Dose 0.5 ml subcutaneous
- Side effects - tachycardia and raised BP.

Salbutamol tablets

- Tablet 4 mg
  Dose 2-4 mg tds
- Side effect : tremor and increased heart rate.
- Advice - check pulse always.
  If pulse more than 120 reduce the dosage.

MANAGEMENT PLAN

NEVER SEDATE A PATIENT DURING AN ASTHMATIC ATTACK. (It suppresses the ventilation, and can cause respiratory arrest).

MILD ATTACK

- Coughing
- Dyspnoea mostly in the evening

Start new patients on **Aminophylline** 100 mg tds or **Salbutamol** 4 mg tds x 3/7. REFER to hospital for assessment when convenient for the patient.

For your old patients if they have more than 3 attacks a month REFER to hospital or ask the Doctor to review them when he next visits. If they are having less than 3 attacks a month continue treatment. You may need to change from Salbutamol to Aminophyline or vice versa depending on the individual response. Patients differ in their response and to the side effects they have so you will have to make an individual assessment. Patients should take the tablets when they feel an attack might start and continue for 3 days.

MODERATE ATTACK

- Starts with a sudden onset
- Productive cough
- Shortness of breath at rest
- Nostril movement present
- Wheezing sounds

TREATMENT

1) See treatment of acute attack (P9 Acute Medical Conditions).

   Give Aminophyline intravenously. Inject 250 mg into 150 ml of 1/2 Darrows/Dextrose and run over 10 minutes.

   Observe the patient carefully.

2) If there is no improvement in the following 2 hours, REFER the patient to the hospital.

3) If the patient is improving, keep the patient on **Aminophylline** 100 mg TDS or **Salbutamol** 4 mg TDS for one week and ask the patient to see the visiting M.O. Keep the patient under observation for 12-24 hours as relapses are common.

IF A NEW PATIENT PRESENTS WITH A MODERATE ATTACK REFER TO THE HOSPITAL AFTER TREATMENT.

SEVERE ATTACK

In a severe attack there is a danger to life. All symptoms of moderate attack may be present. In addition the patient is unable to drink, unable to lie down and unable to talk. Wheezing may be completely absent. A silent chest in an asthmatic is a serious sign.

TREATMENT

Treat with intravenous Aminophyline as for the moderate attack. Start oral Salbutamol tablets 4 mg and REFER patient immediately to hospital

NOTE

An asthmatic patient who coughs up coloured sputum (brown / yellow) give **Procaine Penicillin** 3 mls/d x 7 days or **Cotrimoxazole** 2 bd x 7 days.

NEW PATIENTS WITH ASTHMA SHOULD ALWAYS BE REFERRED TO THE HOSPITAL.

PROGNOSIS

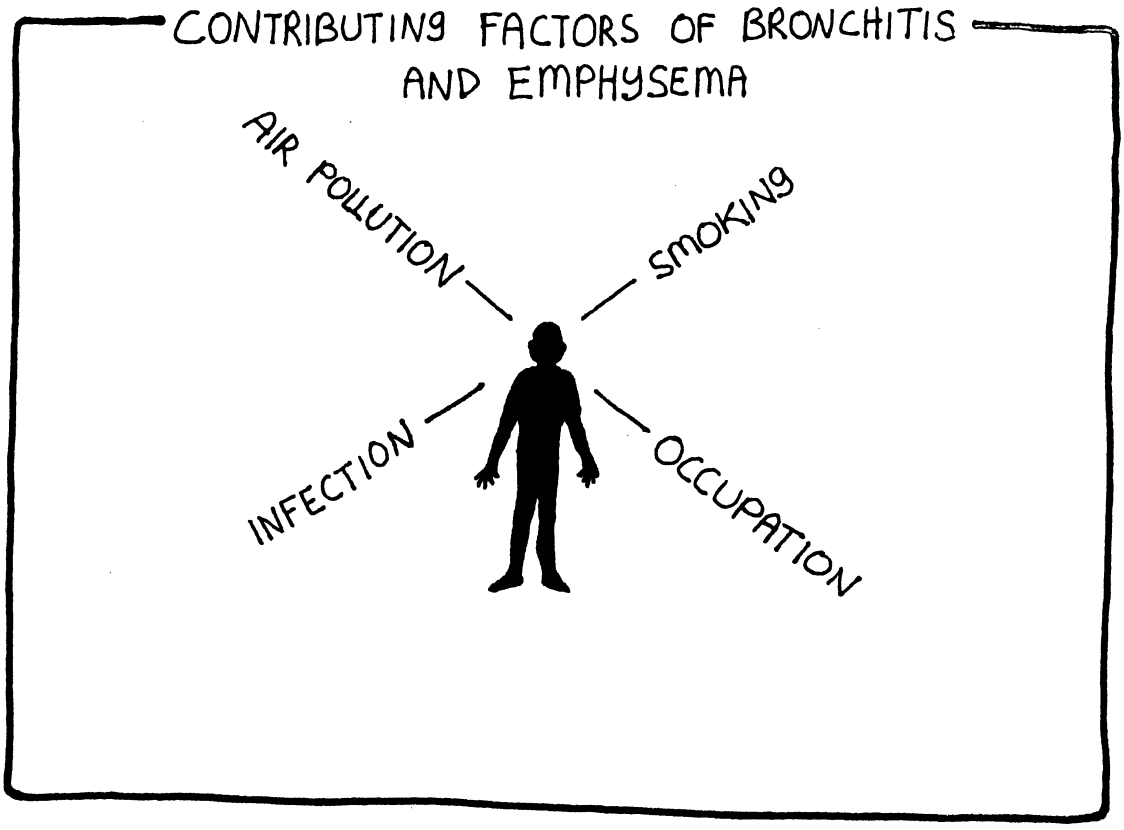
Most patients can expect a reasonably good prognosis especially those whose disease is mild and develops in childhood.

CHRONIC BRONCHITIS

Chronic Bronchitis is an inflammatory condition of the broncholi due to chronic irritation associated with excessive mucus production resulting in a productive cough.

CONTRIBUTING FACTORS

- Smoking
- Air pollution
- Occupation - such as in mining
- Infection



MANAGEMENT

1. Diagnose the disease as early as possible.
2. Prevent the disease from worsening and avoid acute infections by use of antibiotics and health education.

HEALTH EDUCATION

1. Discourage smoking
2. Eventual change of occupation might be advisable
3. Early treatment of infection is most important.

TREATMENT OF ACUTE INFECTION

Tetracycline 500 mg qid x 7 days or

Cotrimoxazole 2 bd x 7 days

IF NO RESPONSE IN 7 DAYS REFER.

TREATMENT OF THE CHRONIC CONDITION

Patients with Chronic Bronchitis may be helped by **Salbutamol** 4 mg tds or **Aminophylline** 100 mg tds.

The patient should take the tablets home to be taken when the chest feels tight. This treatment does not always work.

FOLLOW UP

All patients should be entered in the chronic disease register book.

See example of chronic diseases register.

The M.O. should review 6 monthly if possible.

Severe cases may need a maintenance treatment of **Salbutamol**. Reduce the Salbutamol dose when circumstances allow.

EPILEPSY

(See Psychiatry Module P 19).
(See Acute Medical Conditions Module P 37).
(See Paediatricts Module P 41).

INTRODUCTION

The management of the acute fit is well covered in the Acute Medical Conditions Module P 37-38.

There are many different types of epilepsy. The type with which you are generally concerned is generalised "grand mal" epilepsy.

Patients with epilepsy should be treated as any other patient. They are not "bewitched" or "evil". They suffer from a chronic disease like a patient with hypertension or diabetes. Recurrent fits can make the person mentally dull so it is important that you prevent the fits.

MANAGEMENT

Try to see each epileptic patient every month. When you see the patient

Ask :

- How many fits have there been in the last month?
- Were any injuries sustained?

Examine :

- Check the patient's tongue for recent bite marks.
- Check for any injuries.

DRUG MANAGEMENT

Check that the patient has been taking his Phenobarbitone tablets regularly. If he has been taking the tablets regularly and the fits are still occurring increase the dose by 30 mg at night. If this does not stop the fits REFER the patient.

HEALTH EDUCATION

You should educate both your patient and his relatives that this is a life-long condition that can be effectively treated.

Epilepsy is not infectious and will not affect other children in the household.

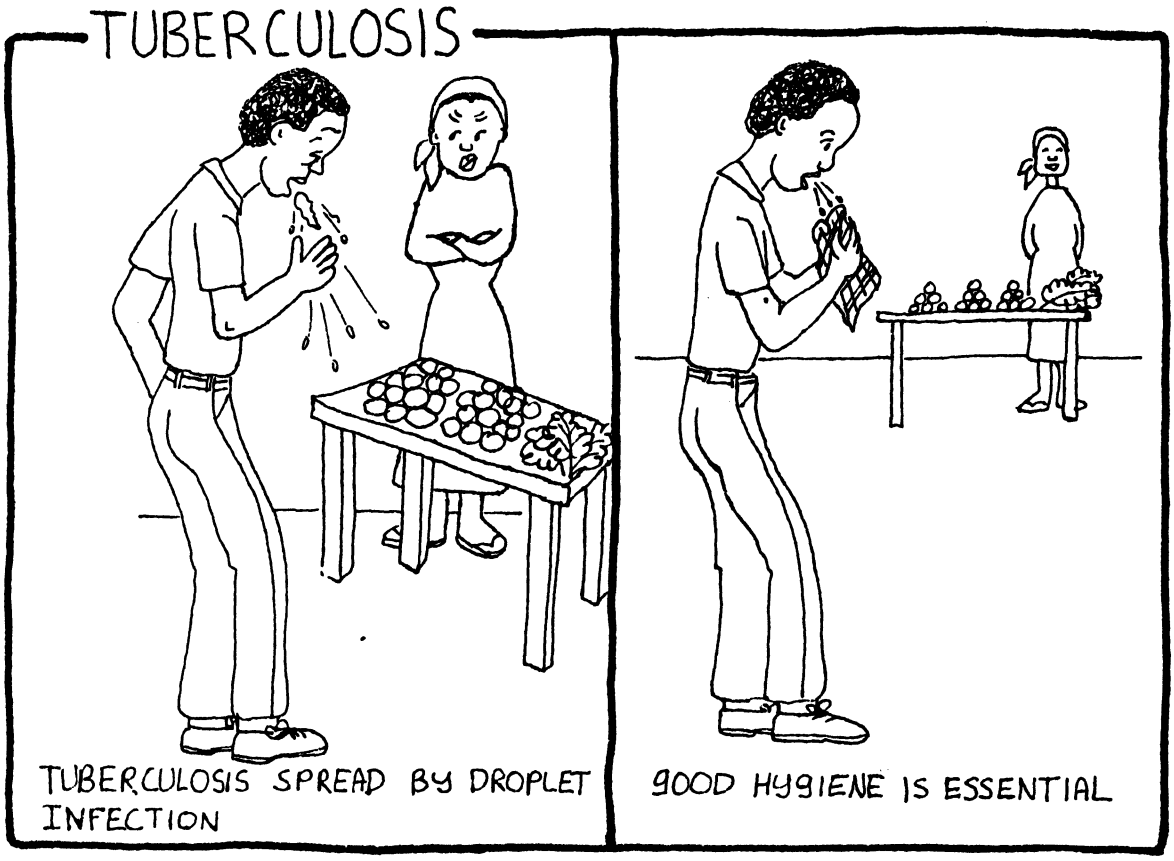
PROGNOSIS

If treatment occurs regularly and is adjusted for each patient's condition the patient can live a normal life. There are some occupations such as bus driving which would not be suitable.

TUBERCULOSIS

DEFINITION

An infectious notifiable disease caused by tuberculosis bacilli, spread mostly by droplet infection. TB occurs throughout Zimbabwe.



TYPES OF TB

There are several types of TB, being:-

- Pulmonary TB (discussed in this module)
- TB of the Spine
- TB Meningitis
- TB of the kidneys
- TB of the peritoneum
- TB of the lymph nodes

SIGNS AND SYMPTOMS

The patient with tuberculosis is likely to complain of the following complaints:-

- Recurrent cough, on and off for more than one month (eventually coughing up blood)
- No weight-gain, or even weight loss
- Swinging low grade temperature.
- Night sweats
- General malaise
- Loss of appetite
- Enlargement of the lymph nodes

Not all symptoms have to be present, but a combination of three of them is enough to be suspicious, and to refer the patient. The family should also be questioned and contacts traced.

HIGH RISK FACTORS

Suspect tuberculosis in patients with:

Family history of TB

Contact with TB case in family, at work, or school.

Chronically ill patient (diabetic, aids, chronic lung disease).

PREVENTION

- BCG at birth
- Booster BCG at 5 years
- Trace and treat all contacts. Refer them to hospital with a note explaining why you think they are TB contacts.
- Health education on proper hygiene, sanitation, housing, good nutrition.

TREATMENT SCHEMES

As a policy, TB patients are treated for two months at the hospital, under supervision. In some circumstances the inpatient treatment can be partly given at RHC level with the approval of the doctor.

There are two regimes of treatment. Regime A for Sputum negative patients and Regime B for sputum positive and complicated patients.

REGIME A - Streptomycin 1/2-1 gm/d for 2 months
HT3 1 tablet /day for 2 months
Pyrazinamide 2 gm/d for 2 months.
followed by HT3 for 10 months.

REGIME B - Streptomycin 1/2-1 gm/d for 2 months
HT3 1tablet daily for 2 months,
Rifampicin 450-600 mg/d for 2 months
Pyrazinamide 2 gm/d for 2 months
followed by HT3 for 6 months.

After discharge from the hospital the patient should go through the RHC to be entered in the Chronic Disease Register.

FOLLOW UP

- Review the patient at the clinic monthly as long as he is on treatment.
- The Medical Officer should see the patient at least at the end of the outpatient treatment and 6 months after stopping the treatment.
- If a specific review date is mentioned on the discharge letter from the hospital, make sure the patient keeps this date.
- If the patient has a return of symptoms refer him back to hospital.
- Patients on rifampicin should avoid oral contraceptive pills and use alternative methods of protection (eg. condoms or loop).
- Try to trace defaulters through Community Health workers.

PROGNOSIS

If detected easily enough and properly managed, the prognosis is very good.

There is a very important Ministry of Health Circular No 3 of 1983 which details all aspects of the management of Tuberculosis.

LEPROSY

Leprosy is a chronic disease which affects people in many areas of Zimbabwe. Recently the policy has changed to multiple drug therapy. This will make a big difference to patients and overall leprosy control.

TYPES OF LEPROSY

There are two types of leprosy.

Paucibacillary - These are patients with few bacteria.

They were previously called tuberculoid. Their main feature is anaesthetic patches (patches without sensation) and nerve damage leading to weakness and ulcers.

Multibacillary - These are patients with many bacteria. The main features are skin lesions.

Refer patients whom you suspect of having leprosy to District Level to confirm the diagnosis, register the patient and start the treatment.

TREATMENT

There are two treatment regimes but both include the taking of drugs under supervision monthly.

Paucibacillary	**Years of Age**		
	0 - 5	**6 - 14**	**15 - over**
Rifampicin (Monthly)	300 mg	300 mg	600 mg
Dapsone (Daily)	25	50	100
Treat the patient for 6 months.			

Multibacillary	**Years of Age**		
	0 - 5	**6 - 14**	**15 - over**
Rifampicin monthly	300 mg	300 mg	600 mg
Clofazamine monthly	100 mg	200 mg	300 mg
Clofazamine	50 mg alt.days	50 mg daily	50 mg daily
Dapsone daily	25 mg	50 mg	100 mg

Treat the patient for 24 months. He must have treatment for at least 8 months out of each 12 months in case of default. If this does not happen treatment will need to be restarted.

The monthly doses of Rifampicin and Clofazamine are given under supervision. This means that you must see the patient actually take the tablets. These are expensive drugs and must be taken regularly to ensure cure.

Refer patients who default on treatment to the provincial leprosy officer who will advise on treatment.

Patients on treatment may have reactions. If these occur REFER.

MAINTAINING A CHRONIC DISEASES REGISTER

To maintain a chronic diseases register information must be filled in 3 places :

1) A patient master card retained in the Rural Health Centre.
2) A chronic diseases register and
3) On the Outpatient Card.

THE PATIENT MASTER CARD

Use a standard outpatient card and fill in the necessary information.

Name..... Chronic Diseases Register Number.....

Date of Birth.....

Sex..... Occupation.....

Physical Address .....
.....

Next of Kin .....
Address .....
.....

Diagnosis .....

Treatment .....

Name of Health Worker who will trace in case of defaulting.....

Date First Seen .....

Date Next Review .....
.....
.....

This card is filled in at first attendance and the date for review is recorded on each attendance.

Keep the cards in a box with divisions for each month. When the patient attends move the card in the box to the division for the next month of review. If the patient does not come, the card remains at the end of the month. You can easily see which patients have not come and arrange to trace them.

PATIENT MASTER CARD

CHRONIC DISEASES REGISTER

Name	O Mutasa	4/87
DOB	Dec 1944	
Sex	Female	
Occupation	Housewife	
Address	Chato School Kubatsira Ward Kunaka District	
Husband	Chato School (teacher) Same address	
Diagnosis	Hypertension	
Treatment	HCT - 50 mg ld.	
Health Worker	VHW Nyamuza	
Date first Seen	1984.	
Date next Review	April 1987. May 87 (added Reserpine) June 87 ✓ July 87 ✓	

CHRONIC DISEASE REGISTER

For the chronic diseases register use the combined Tuberculosis Leprosy Register (GP & S 31250-R).
On each page cross out "Tuberculosis" and write the disease for that page.

Fill in the name and number of the patient and then put the signs to be checked bel
Also put the treatments. Leave space for later additions.

Putting all this information may mean that only three patients are put on each page.

Do not use the months as printed. Cross them out and start with the month the pat
was first seen. See examples for Different conditions.

CHRONIC DISEASES REGISTER

Hypertension ~~Tuberculosis~~ Cases treated during the six months ended 31st December, 19

Case No.	Name	~~July~~ March 87	~~August~~ April	~~September~~ May	~~October~~ June	~~November~~ July
4/87	O Mutasa					
	BP	160/100	170/100	170/105	160/95	160/95
	Weight (Kg)	94	96	96	94	94
	Oedema	–	–	–	–	–
	Rx HCT (mg)	50	50	50	50	50
	Resepine (mg)			0·25 bd	0·25 bd	0·25 d
			Advice ++			
6/87	S Sibanda					
	BP	160/95	160/95	150/95	·	150/95
	Weight (Kg)	82	80	77		77
	Oedema	+	–	–		–
		Advice	Advice	Advice		Advice

CCF

~~Tuberculosis~~ Cases treated during the six months ended 31st December, 19.....

Case No.	Name	July Feb 87	August March	September April	October May	November June	December July
3/87	L Moyo						
	BP	120/95	125/90	120/90		VHW	
	Pulse	84	68	74		6 days	
	Weight	72	69	70		in	
	Oedema	++	+	+			
	Neck Veins	+	-	-		Harare	
	HCT (mg)	50	50	50			
	Digoxin	0·25 bds	0·25 bd	0·25 bd			
7/87	A Kanengoni						
	BP			150/90	IN	160/95	
	Pulse			94		68	
	Weight			72	HOSPITAL	70	
	Oedema			++		+	
	Neck Veins			++		-	
	HCT (mg)			50		50	
	Digoxin (6/87)			REFER.		0·25 bd	

Diabetes

~~Tuberculosis~~ Cases treated during the six months ended 31st December, 19.....

Case No.	Name	July March 87	August April	September May	October June	November July	December August
5/87	L Nyoni						
	Weight (Kg)	68	68	69	Away	64	65
	Urine Sugar	++	++++	+	with	++	+
	Dextrostix	130	176+	130	Relatives	90	130
	Insulin Lente(U)	40	44	44		44	44
8/87	S Dube						
	Weight (Kg)	96	94	94	92	Missed	92
	Urine Sugar	+	+	+	-	Attending	-
	Dextrostix	90	90	130		VHW	
		Advice	Advice	Advice++	Doing Well	Mapfu sent	Advice.

THE PATIENTS OUTPATIENT CARD

Use the normal outpatients card. Fill in the name and address as usual but also put the Chronic Diseases Register number (CDR). At each visit record your findings both in the register and on the outpatients card. Record the date of review on the patient master card and on the outpatient card. You need to fill in these three records because the patient may go to another clinic and so needs outpatient card, he may default which you will detect with your box of patient master cards. The main advantage of the Chronic Diseases Register book is that you can see how the patient is doing without ploughing through a mass of mixed up old cards. Try the system out with a few regular patients to start with and build it up slowly. You may be surprised how easy the system works!

PATIENTS OUTPATIENT CARD

G.P. & S. 30157-D. 62391-7
Z. 1009 (P.H.)

OUT-PATIENT RECORD CARD

Name O Mutesa Number

Address Chute School
Kubatsira Ward

W C C	YES
	NO

Class of patient CDR 4/87

I certify that the person responsible for payment of fees—

*(a) earns $150 or less per month;
or
*(b) earns more than $150 per month.
(*delete the inapplicable)

Date Signature Witness

Date	Clinical notes and treatment	Stamp
6/4/87	Hypertensive on CDR	
	BP 170/100	
	Wt 96	
	Oedema -	
	Rx HCT 50 mg/d x 1mth	
	TCA 7/5/87	
	Advised to loose weight	
		RL

INDEX CHRONIC MEDICAL CONDITIONS