THE REPUBLIC OF UGANDA
MINISTRY OF HEALTH

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Ministry of Health

National Tuberculosis and Leprosy Programme

TUBERCULOSIS CASE MANAGEMENT DESK AIDE

APRIL 2005

PREFACE

This is the first time the Tuberculosis Case Management Desk Aide is being produced by the National Tuberculosis and Leprosy Programme (NTLP). It is a job aid (Aide Memoir) document to help Health Workers make quick reference on issues which are of particular importance in making decisions necessary for the management of a tuberculosis patient.

A lot has changed in the case management of tuberculosis in the last decade. In Uganda in particular since the adoption of the policy of CB-DOTS Strategy, for tuberculosis control there has been need not only for retraining of Health Workers, but also the need for the Health Workers to train Sub-county Health Workers and Community Volunteers.

The Tuberculosis Case Management Desk Aide tries to concisely address issues which a Health Worker at a busy, multidisciplinary Health Unit will handle on a day to day basis. These are:

- Diagnosis of tuberculosis
- Educating tuberculosis patients
- Drug treatment of tuberculosis patients
- Ensuring continuation of treatment for tuberculosis
- Tracing and managing contacts of tuberculosis patients
- Training of Sub-county Workers and Community Volunteers

While every effort has been made to keep the information in the Desk Aide up to date, it must be pointed out that information, particularly on drug dosages may change depending on the source of procurement. It is hoped that should situations arise where drugs procured may not conform to what is in the Desk Aide, the distribution of such drugs will be accompanied by a Circular from the central office of the National Tuberculosis and Leprosy Control Programme explaining how such consignment of drugs should be used.

This Tuberculosis Case Management Desk Aide will go a long way in improving the quality of care of tuberculosis patients at District Health facility level.

Director General Health Services/ Programme Manager NTLP
Ministry of Health

ACKNOWLEDGEMENTS

The purpose of developing the "TB Desk-aide" is to ensure quality of community-based TB care-DOTS (CB-DOTS). The "TB Desk-guide" follows the logical sequence of actual care delivery process, according to national and international (WHO) guidelines.
This Desk Aide would have not been possible without the hard work and dedication of the working group on adaptation of TB case management Desk aide for the first time in the history of the NTLP. The materials were adapted from generic TB training Materials developed by the TB research and Development programme in conjunction with the National TB programme /ASD Pakistan. The National Tuberculosis and Leprosy Programme is particularly grateful to AIM district programme for funding the a writer during the adaptation process, consensus workshop of the TB experts and district partners to review the work of the working group, the professional editor who edited the final manuscript and for the printing of the first batch of these training materials. Special thanks go to Dr. Martin Okot Nwang for editorial review and proof reading before printing and to Samson Dr Haumba who worked with him through out the process.

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List of Acronyms

HIV	-	Human Immunodefieciency Virus
AIDS	-	Acquired Immune Defiency Syndrome
TB	-	Tuberculosis
NTLP	-	National Tuberculosis and Leprosy Programme
CO	-	Clinical Officer
MO	-	Medical Officer
DOT	-	Direct Observation of Treatment
CB-DOTS	-	Community - based Direct Observation of Treatment Short Course
SCHW	-	Subcounty Health Worker
ARV(s)	-	Antiretroviral(s)
PDC	-	Parish Development Council/Committee
LC	-	Local Council
DTLS	-	District Tuberculosis and Leprosy Programme
BCG	-	Bacille Calmette Guerin
NEG	-	Negative
POS	-	Positive

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Bullet Key:

➢ Main step: This refers to a point/area under consideration
✓ Sub-step: This refer to two or more points related to the main step above
❑ Condition: This refers to conditionality (if), and usually followed by an action statement under that particular condition
☞ Recommended action: This refers to an action, in the light of points considered above

Introduction

The Tuberculosis Case Management Desk Aide is a guick reference material to help a health worker get correct information about Tuberculosis Case Management at a busy health facility. Over the past decade the Tuberculosis case load has continued to increase despit effective case management strategy being available. Furthermore, there has been a lot of incorporation of new descriptions/definitions in the field of tuberculosis.

Considering that the health worker in Uganda is always busy and multi-displinary, the Tuberculosis Case Management Desk Aide has been designed for such a kind of health worker.

It is arranged in a sequantial order of Definitions and keys to symbols, identifying TB Suspects and Diagnosis of TB, Treatment of TB, Community TB Care and finally Management of patients who interrupt treatment.

It is well known that during this era of HIV/AIDS, may patients with TB also suffer from HIV/AIDS. Such patients may have other opportunitstic infections in addition to their TB. This calls for additional treatment in such TB patients. Furthermore, some of these TB patients may need treatement with, or are ebing treated with ARVs.

This Tuberculosis Case Management Desk Aide deals with TB only. Treatement of non-TB illness in TB patients is beyond the scope of this Desk Aide. Should there be a need other Desk Aides – e.g. Uganda Clinical Guidelines can be consulted.

Definitions

Type of TB Patient:

New case: A patient who has never taken treatment for tuberculosis or has taken anti-tuberculosis drugs for less than four weeks in the past.
Relapse: A patient declared cured or treatment completed in the past, who again has a positive sputum smear (or culture).
Transferred In: A patient who has been transferred from another TB register to continue treatment.
Treatment Failure: A patient who while on treatment is sputum smear positive 5 month or later during the course of treatment OR Smear negative patient found smear positive at completion of 2 months treatment.
Return after default: A patient who returns to treatment after interrupting treatment for 8 weeks or more, who had been previously treated for 4 weeks or more.
Others: Patients who do not fit in the above mentioned types such as patients known to have taken TB drugs for more than 4 weeks from outside the programme.

Category of TB Patient:

Category-1 New case of TB
Category-2 A TB patient, who was previously treated for more than four weeks in the past; including relapse, failure, treatment after default
Category-3 Any child up to the age of 12 years

Treatment Outcomes:

Cured: Initially sputum smear positive patient who has completed the treatment (eight month) and is smear negative in the last month or treatment and on at least one previous occasion.
Completed: Initially sputum smear positive patient who completed the treatment (eight months) and had negative smears at the end of intensive phase, but with no sputum examination at the end of treatment OR
smear negative patient who received a full course of treatment (eight months)
Failure: Smear positive patient who remained, or became again, smear positive five months or later after commencing treatment OR smear negative found smear positive at the end of 2nd month
Defaulted: A patient who at any time after registration had not collected drugs for consecutive two months or more
Transferred out: A patient transferred from one TB register to another TB register
Died: Patient who is reported to have died of any reason during the course of treatment (based on information gathered and recorded by a responsible health worker)

Tuberculosis Case Management Desk Aide Uganda NTLP

Identifying TB Suspects in Patients with Cough

Try to provide privacy and courtesy; with only one client in the room,

- Greet, ask their name, and ask what the problem is?

IF THE PATIENT COMPLAINS OF COUGH ask:

How long have you been coughing? As necessary, ask further questions to know if the cough has been present more or less than 3 weeks, e.g:

- Has he/she recently had a cough before this?
- If yes, ask for how long?

What other symptoms does he/she have?

- Does he/she cough up sputum? What colour? Is it stained with blood?
- Does he/she have fever, if yes, for how long, Is it more by day or night?
- How is his/her weight and appetite?

What drugs he/she is taking? Check which drugs and how long taken

Does he/she smoke? if so, for how long ?

Does any of **close contact**/family member **suffer** (has suffered) from **TB**?

Examination - look and listen for these signs:

- Count the pulse
- Take the temperature
- Count the respiratory rate, and use a stethoscope (ask to breathe deeply).

DECIDE THE LIKELY PROBLEM (S), ADVISE AND TREAT:

Suspect other chest illness and treat or refer accordingly.

Suspect TB if any of these present

- Cough more than 3 weeks, or
- Cough less than 3 weeks or of uncertain duration, PLUS either
- ✓ Blood stained sputum or fever at night or weight loss, or
- ✓ Previous TB in the patient, family or other close contact
- ☞ Explain importance of sputum exams, collect & send 3 sputums to the lab

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[a] *Sending 3 Sputum Smears to the laboratory:*

- ❑ If at a treatment centre with no lab: explain how to take a deep cough into the container, for the Spot 1st sample. Give a sputum container and explain to do a deep cough into the container as they wake in the morning. Say to then return for collection of the 3rd sample (Spot 2). Send the containers and request form to the laboratory (if this is not possible then the patient can take the specimens).
- ❑ If patient presents directly to a facility with a laboratory send the patient to laboratory.

Diagnosing TB Patient – Clinician (Nurse, CO, MO)

Steps in Diagnosing a TB Patient

DIAGNOSING A TB PATIENT:

- The sputum sample is sent (or if not possible, then the patient visits) the laboratory for sputum examination and result sent to the requesting clinician.

Decide if Pulmonary TB (and if smear positive or negative):

- If two or more positive sputum smears,
  - Register as sputum positive pulmonary TB
- If one sputum positive - refer to the MO for X-ray/ clinical judgement, as below*
- If negative - all three sputum smears found negative then
  - Give antibiotic for 7 days, and give appointment in 7 days
    - if not better - repeat three sputum smears
    - If much improved - not TB, but advise to return if chest symptoms return
- If two or more positive sputum smears (from the first and second set of smears)
  - Register as sputum positive pulmonary TB
- If only one positive*
  - Refer to the MO for X-ray/ clinical judgement
    - If judged to be TB, then register as sputum positive TB
- If no sputum positive refer to the MO, then if
  - If MO judges consistent with active pulmonary TB, and patient found still ill with chest symptoms after taking a full course of antibiotics,
    - Register as sputum negative pulmonary TB
  - If X-rays are not consistent with active pulmonary TB,
    - MO treats according to other diagnosis

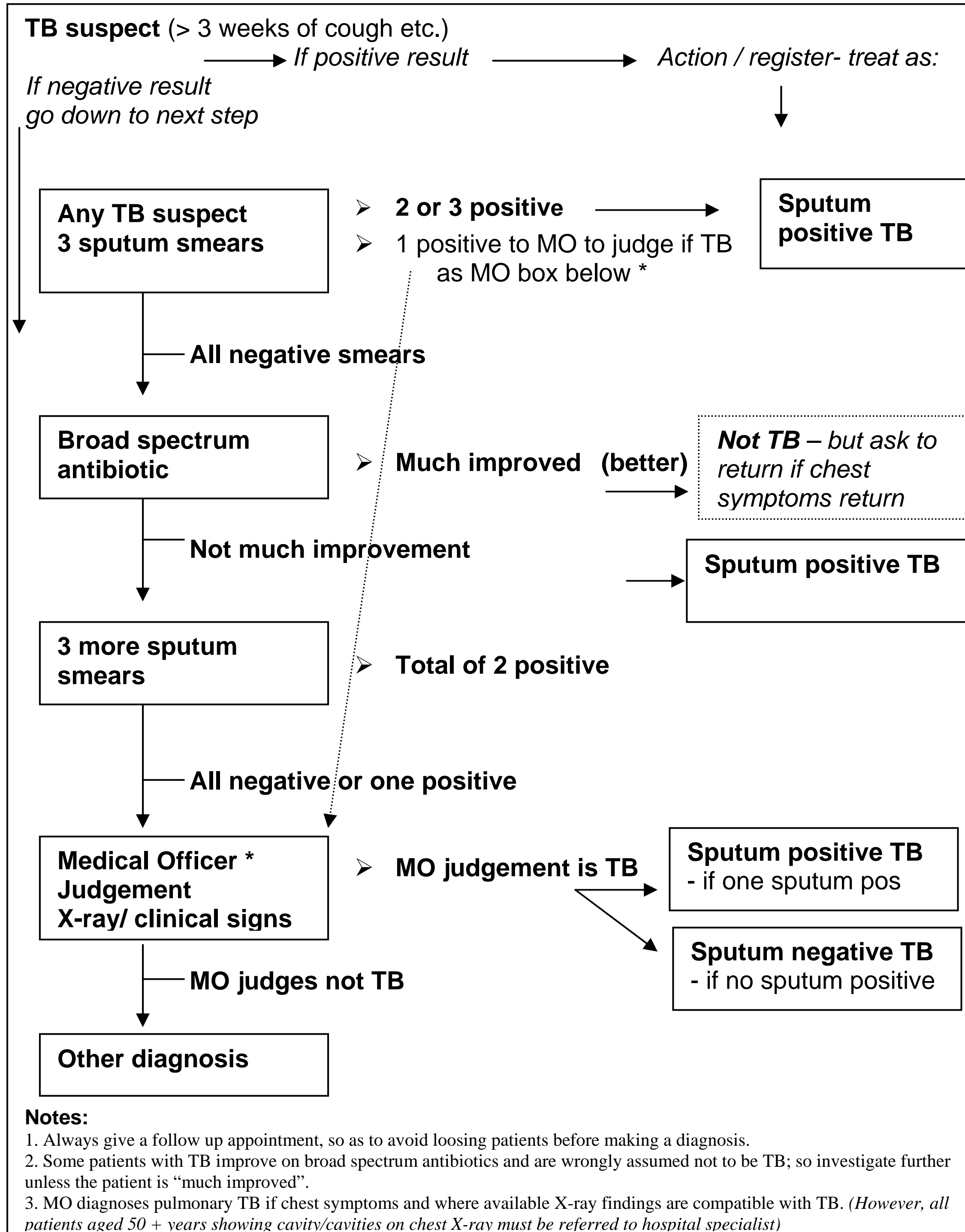
NB. Register as sputum positive TB, if either 2 or more sputum positive, or one sputum positive and a MO clinically judges to be TB.

Decide Type of Pulmonary TB Patient: based on past history(see p3) of **TB drugs**

History of drug intake	Smear result now	Type of patient
➢ Never taken TB drugs in past ➢ Taken TB drugs for less than 4 weeks in past	Smear positive or Smear negative	New case
Taken TB drugs and transferred from another TB Register	-	Transfer in
Taken full course of TB treatment in past & declared cured.	Smear positive	Relapse
➢ Smear positive patient taken TB drugs for 5 + months ➢ Smear negative patient taken drugs for 2 months	Smear positive	Treatment Failure
Taken drugs for at least 4 weeks, then interrupted for 8 weeks	Smear positive Smear negative	Return after default
Taken a full course of retreatment regimen and then remains sputum positive	Smear positive	Others - chronic

Diagnosing TB Patient – Clinician

Steps and Actions to Follow from TB Suspect to TB Diagnosis



Notes:

1. Always give a follow up appointment, so as to avoid loosing patients before making a diagnosis.
2. Some patients with TB improve on broad spectrum antibiotics and are wrongly assumed not to be TB; so investigate further unless the patient is "much improved".
3. MO diagnoses pulmonary TB if chest symptoms and where available X-ray findings are compatible with TB. *(However, all patients aged 50 + years showing cavity/cavities on chest X-ray must be referred to hospital specialist)*

Categorizing TB Patient - Clinician

Categorize and decide on Treatment Regimen

COMPLETE THE TB TREATMENT CARD AND UNIT REGISTER.

- **Fill out** the patients personal details and include the:
  - disease classification and sputum smear results eg. sputum positive pulmonary
  - type of patient i.e. new or retreatment case (ask carefully if have taken TB drugs previously and if so was it for 4 weeks or more, see box below)
  - category of treatment.

Decide the Treatment Category:

1. New adult TB patient, category 1 - any TB patient (who has not taken more than 4 weeks of TB drugs in the past)
2. Re-treatment patients, category 2 – any relapse, return after default, failure or other patient who has taken more than 4 weeks TB drugs in the past
3. Children up to 12 years, category 3.

PRESCRIBING DRUGS AND EXPLAINING TREATMENT:

- **Prescribe** regimen (page 10 and 11)
  - ☞ Calculate dosage of each drug, according to the patient weight
- **Educate on TB and HIV**
- **Discuss the benefits of an HIV test** and if positive discuss long term cotrimoxazole preventive treatment to prevent common chest and gut infections
- If they agree start cotrimoxazole 2 tablets (of 480mg) daily.
- **Discuss CB-DOTS** (page 13), if not accepted then admit for the initial phase of treatment, if accepts then, start health unit DOT for 2 weeks
- **Contact the SCHW** to arrange community meeting and select community volunteer (page 9)

Prescribing Drugs to TB Patient - Clinician

Prescribing for Category 1 – New adult (> 12 years)

A new case is a patient who has not taken TB drugs before, or has taken less than 4 weeks of TB drugs in the past, (or a patient who has interrupted treatment of more than 4 weeks but is found sputum or culture negative).

Regimen / Patient's Weight	**Initial phase** (2 months)	Continuation Phase (6 months)
	2(RHZ)E)	6(EH)
	Daily 56 total doses	Daily 168 total doses
	(Isoniazid 75mg+ Rifampicin 150mg + Pyrazinamide 400mg + Ethambutol 275mg)	(Isoniazid 150mg + Ethambutol 400mg) for 6 months
30-37 kg	2	1.5
38-54 kg	3	2
55-69 kg	4	3
70 kg +	5	3

The above are for the combination HRZE by the drug company **MEG** (supplied through the Global TB Drug Facility).

*However,the **Plethico INFEZ** combipack contains 2 brown tablets with (R 225 mg, H 150 mg and Z 750 mg) and one white tablet (E 800 mg), which is the dose for the initial phase for an adult of 38 kg or more.*

The drugs supplied may change, if so contact your District TB and Leprosy Coordinator for directions.

Updating circulars sent to accompany drug distribution when supply changes.

Prescribing for Category 2 – Retreatment in adult (> 12 years)

A retreatment case includes treatment failure, relapse, return from default and others who have taken more than 4 weeks of TB drugs in the past (unless all 3 sputum are negative).

Regimen / Patient's Weight	**Initial Phase (3 months)**		Continuation (5 months)
	2(RHZ)E)S / 1(RHZ)E)		5(HR)E
	Daily 84 total doses of HRZE plus 56 doses of S		Daily 140 total doses
	(Isoniazid 75mg+ Rifampicin 150mg + Pyrazinamide 400mg + Ethambutol 275mg)	Streptomycin (vials,IM) 2 months	(Isoniazid 100 mg + Rifampicin 150 mg) + separately Ethambutol 400mg
30-37 kg	2	0.500	2 + 1.5
38-54 kg	3	0.750	3 + 2
55-69 kg	4	1g*	4 + 3
70 kg +	5	1g*	5 + 3

* 0.750 if 60 years or over. The above are for the combination HRZE by the drug company **MEG**.
*However, for the **Plethico INFEZ** combipack of HRZ & E, see the note under the table above.*

Prescribing for Category 3 – Children's up to 12 years regimen

Regimen / Patient's Weight	**Initial phase** (2 months)	Continuation (4 months)
	2 months RH and Z	4 months RH
	Daily 56 total doses	Daily 112 total doses
	HR (Isoniazid 30mg+ Rifampicin 60mg) + Pyrazinamide (Z) 150mg +	HR (Isoniazid 30 mg and Rifampicin 60 mg) for 4 months
Up to 9 kg According to weight	Calculate to nearest number of children's tablets; H 5 mg/kg and R 10 mg/kg daily, plus Z (Pyrazinamide) 25 mg/kg	Calculate to nearest number of children's tablets; H. 5 mg/kg and R. 10 mg/kg daily
10 – 14 kg	HR 2 tabs + Z 2 tabs	HR 2 tabs
15 – 19 kg	HR 3 tabs + Z 3 tabs	HR 3 tabs
20 – 29 kg	HR 4 tabs + Z 4 tabs	HR 4 tabs

Adult HR (Isoniazid 100 mg + Rifampicin 150 mg) tablets. A child of 15–19 kg may have HR 1 adult tabs, if 20-29 kg HR 1 and half adult tabs, if above 30 kg then 2 HR tablets (plus in the initial phase child (150mg) tabs of pyrazinamide as above, or equivalent dose of adult Z (400mg) tabs).

Educating Patient about TB/ HIV – by Clinician/ SCHW

Messages for Educating TB Patients

EDUCATE TB PATIENT - Clinician at start (0) and *reinforcing* key messages at 2, (3), 5 and 8 months, and by SCHW at the community meeting and visits

- ✓ Tuberculosis is a disease of the lungs caused by germs (or explain the part, e.g. spine affected).
- ✓ Cough spreads the TB germs. TB is not spread through plates or clothes (etc.)
- ✓ Cover your mouth when you cough - bury any sputum you've coughed out.
- ✓ Treatment cures TB. You must take TB tablets for 8 (children 6) months. Your treatment will last until....…. (say which month it finishes)
- ✓ TB medicines are free. Your drugs will be delivered by the SCHW who will visit your village every 2 weeks in the first 2 months, then every 4 weeks
- ✓ There is no reason to feel ashamed of having TB. Tuberculosis is not inherited.
- ✓ You should eat well and not drink much alcohol. You should not smoke.
- ✓ Treatment cures tuberculosis. You will soon feel better with treatment and not be infectious to others after 2 weeks treatment
- ✓ However, it is very important to take the pills for the full 8 months. If you stop treatment early the TB will come back and be much harder to treat.

Explain the treatment to the patient:

- ✓ Show the tablets and explain the number of each tablet to take daily
- ✓ Explain that we will arrange for someone to help you take your tablets daily
- ✓ Do not worry if the urine goes orange, it is normal with these drugs, but if any other unwanted effects from the drugs, report to health facility

Educate on HIV in TB patients

- ✓ TB is a disease anyone can get. However, people who drink too much alcohol or people who have HIV get it more easily
- ✓ Some people with TB have HIV as well. You can't tell by looking that someone has HIV.
- ✓ People with HIV and TB can be cured of their TB the same as other people
- ✓ Protect yourself and others from HIV by Abstaining, Being faithful or by using a Condom each time you have sex (ABC)
- ✓ It is recommended that you have an HIV test. If you are HIV positive, you can:
  - ✓ Come early for treatment of infections, so avoid severe HIV-related illness
  - ✓ give you tablets (cotrimoxazole) daily to protect you against infections that are common with HIV
  - ✓ if pregnant women can be protected against giving HIV to their babies
  - ✓ take the drugs against HIV – the ARVs – once they are available

Discuss CB-DOTS with the Patient - Clinician

Information about CB – DOTS

Explain CB-DOTS to the patient, and why it is important to continue drugs

Say:

- It is important that you take your drugs every day, for eight months.
- After taking tablets daily for 8 months you **will** be cured.
- Almost everyone forgets to take medicine especially when they are feeling well.
- If you wish you may take the tablets at home instead of staying in hospital for the first two months. If so, a community volunteer instead of a nurse can watch you take your tablets.
- The volunteer chosen will help you to remember to take the right pills in the right dose for the right length of time - so that you will be cured.
- Also, you can tell your community volunteer if there are any unwanted effects of the TB tablets, and they can go with you to the treatment centre.
- This is why we advise you to have a community volunteer to watch tablet taking and support you take your treatment.
- **Explain** that if s/he accepts, then the SCHW will arrange a community meeting, which will select a community volunteer (acceptable to you). Then he will visit (initially every 2 weeks later every 4) weeks to deliver drugs, and see that everything is OK with the treatment, until treatment is completed
- **Ask** the patient if s/he has any questions or concerns? Answer these concerns
- **Ask** if they accept community based TB care, if no admit for the initial phase of treatment, if yes then follow steps below under Managing **CB-DOTS**:

MANAGING CB-DOTS: for new patients, that choose CB-DOTS,

- Start Health Unit DOTS
- Inform the SCHW, who contacts the PDC or LC who arrange a community meeting.
- The SCHW facilitates the community meeting, to choose a community volunteer, and checks that the choice is acceptable to the patient
- The TB drugs will be given by the SCHW to the community volunteer (but if a delay is likely then admit and observe treatment until a volunteer is selected).

❑ If the patient is to receive further treatment from another TB treatment centre:

☞ Fill in the transfer/ referral form (to go with the patient to the treatment centre, and another sent to the DTLS who will send it to the treatment centre)

Community Meeting to Select Volunteer - SCHW

SCHW Messages for the Community

Arrange a community meeting as soon as possible:

- **Explain** the purpose of the meeting; to learn about TB and discuss how they can help prevent the spread of TB.
- **Say** that someone from the village has been diagnosed with TB,
- **Say** that TB is spread by coughing
- Other people may also have TB – anyone who has a cough of more than 3 weeks should have their sputum examined
- On TB treatment the patient will not be infectious after only 2 weeks treatment, and will be cured if they take a full 8 months of treatment.
- **Explain:** About TB, as for the points on page 12 above. Including that the patient will no longer be infectious after 2 weeks treatment
- **Explain** at the community meeting that it is best for them to choose a community volunteer, to watch the tablet taking and support the patient
- **Advise:** they choose someone who:
  - Lives nearby
  - Will be reliable
  - Is concerned about the patient,
  - Is acceptable to the patient
  - Is able to read and write
- **Facilitate:** the choice of a community volunteer
- **Agree** with the patient that the community volunteer selected is acceptable
- **Ask:** them to support the community volunteer and patient so they are cured
- **Ask:** the community to bring anyone who is coughing more than 3 weeks to have sputum checked
- Explain that you the SCHW will visit each month to:
- ✓ monitor compliance by asking questions, reviewing the TB treatment card, count the strips of drugs taken, and
- ✓ encourage/help the patient to complete treatment
- **Ask** the patient if they have any questions or concerns
- ☞ **Answer** these questions and discuss the concerns
- **Thank** them for attending and acting positively to care for TB patients in the community

Enter the patient into the SCHW register

Preparing Community Volunteer - SCHW

Preparing Community Volunteer:

The community member has been chosen at a community meeting and the patient has freely agreed to the choice. The SCHW (or other Treatment centre health worker) now meets with the Treatment Supporter, (community volunteer) then:

- **Ask: Have you accepted to be a treatment supporter, if so then:**
- **Explain**
  - ✓ Importance of "support" to ensure that the patient gets cured (page 13)
  - ✓ Patient's treatment using tablets (recognizing various tablets, number of tablets to be taken each day)
  - ✓ How tablets should be collected from treatment centre and stored.
  - ✓ Schedule and importance of follow-up visits to Diagnostic Centre at the end of months 2, 5 and 8 (category-2: at 3, 5 and 8th month only)

- **Do**:
  - ✓ Demonstrate the steps for observing the drug intake (see the Do's and Don'ts on page 16 below.
  - ✓ Show an example of the TB Treatment Card (best show the patients TB card).
  - ✓ Show Supporter how to record drug intake on Card (using symbols X, O or ---)
  - ✓ Let Supporter practice, give guidance to correct problem or omission.

- **Explain** what to do to Community Volunteer:
  - ❑ If patient says he/she will not be able to contact the Volunteer for next one or more days
  - ☞ Instruct that medicine be given for requested number of days
  - ❑ If patient misses one day of treatment,
  - ☞ Wait for next day, if again missed then visit to try to find out the problem.
  - ❑ If patient does not agree to continue the treatment,
  - ☞ Community Volunteer must inform the SCHW or health worker at the treatment centre.
  - ❑ If any complaint with intake of drugs is noticed/ experienced.
  - ☞ Patient must report to treatment centre
- Give out the first 2 weeks supply of drugs.

Do's and Don'ts - Community Volunteer

How to Directly Observe TB Treatment

COMMUNITY VOLUNTEER SHOULD;

- ✓ **Greet** and welcome the patient. Ask how he or she is and listen to the response while you prepare to give the tablets
- ✓ Pop the pill out of the blister pack onto the patients hand (avoid touching the tablet)
- ✓ Offer him or her a glass of water.
- ✓ **Watch** tablet taking
- ✓ Each tablet of the daily dose must all be taken at the same time.
- ✓ Talk to your patient while he or she swallows the tablets, watch that he/she swallows the tablets.
- ✓ **Record** on the TB Treatment Card (which the volunteer keeps).
- ✓ **Encourage** to keep taking the tablets regularly
- ✓ **Discuss** with the PDC or LC chair or the SCHW if problems arise
- ✓ **Remind** the patient to give sputum specimens and then attend the treatment centre at 2, 5 and 8 months

Do's and Don'ts of Treating Your TB Patient

DO	DO NOT
Make sure the medicines are kept out of the way and safe.	✕ Do not store tablets in damp places.
Keep medicines out of reach of children.	✕ Do not drop tablets on the floor.
Know the name, colour and strength of each tablet.	✕ Do not replace one patient's tablets for another's.
The patient may swallow the tablets with water.	✕ Do not give only part of the daily medicines.
Encourage him/her when feeling depressed, or despairing that he/she is going to get better, Say that if he/she takes tablets every day for the full 8 months – he/she ***will*** get completely well.	✕ Do not criticise, ✕ Do not get angry or shout at the patient- it is not easy being ill and taking tablets for 8 months. Everyone gets frustrated sometimes.
Refer all complications and side effects to the health worker.	✕ Do not treat side effects, but send to the treatment centre.

Managing Household Contacts

Screening Household Contacts

MANAGING HOUSEHOLD CONTACTS – at a home visit by the SCHW

- All household contacts of a sputum smear-positive patients are screened by asking questions about cough and other symptoms.
- Following two types of the household members are identified and called to the diagnostic centre for further assessment and/or management:
- ✓ 5 years or more old with symptoms suggestive of tuberculosis, and
- ✓ Less than 5 years old, regardless of symptoms suggestive of tuberculosis
- The household contacts of sputum smear positive cases are screened for symptoms and referred to the diagnostic centre.

- **If known to be HIV positive** ask about disclosure to the partner, and advise on the benefit of HIV testing for them.

Managing Household Contacts at Diagnostic Centre

Household Contact	Screening	Management
Adult	Chest symptoms (cough > 3 weeks or other TB symptoms)	Arrange sputum smears
Child	No TB symptoms Prior BCG? (0-5 yrs only)	Reassure Give BCG (if no prior BCG)
	H/o cough of 2-3 weeks or more, or fever, or weight loss	Refer to Medical Officer, or Paediatrician if available
Child breast fed by smear positive mother	-	✓ Treat mother ✓ Protect child with INH (5mg/kg) for 6 month if not BCG vaccinated ✓ Continue breast feed ✓ At completion of 6 months, give BCG if not already given.

Follow-up visit by SCHW

FOLLOWING-UP OF TB PATIENTS IN THE COMMUNITY

Every 2 weeks in the initial phase, then every 4 weeks in the continuation phase, the SCHW delivers the drugs to the community volunteer. At this visit, he or she:

- **Find out** the regularity of TB drug intake by asking questions to the community volunteer and patient, counting the remaining strips/ tablets and review the TB Treatment Card (NB. if HIV positive also ask about Cotrimoxazole adherence)
- If regular complement; If not regular: ask why and help solving the problem
- **At the end of month** 2 (3 if Category-2), 5 and 8 :
  - ✓ Collect a check sputum specimen and transfer it with the request form to the laboratory (if not possible, then the patient takes them to the laboratory)
  - ✓ Explain, they should return with the result to the treatment centre clinician
  - ✓ Record sputum results and prescription change on TB treatment card.
- **Ask** if patient has any complaint indicating side effect, if yes, **Examine** and decide
- **The SCHW in consultation with the clinician, advises/manages the patient according to the following guidelines:**

If patient has a side effect:	**Then Manage as follows:**
Minor Side Effects ✓ Anorexia, nausea, abdominal pain	Continue anti-TB drugs and: Give drugs last thing at night
✓ Joint pains	Aspirin
✓ Burning sensation in the feet	Pyridoxine 100 mg daily for 1 month, then 10-25mg daily
✓ Itching of skin	Anti histamine
	If no response refer
Major Side Effects ✓ New or severe skin rash ✓ Deafness ✓ Dizziness (vertigo & nystagmus) ✓ Jaundice ✓ Visual impairment (other causes excluded) ✓ Shock, purpura, acute renal failure	**Stop anti-TB drugs (and Cotrimoxazole if a new rash)** **Refer to a Medical Officer**

NB 1. If orange/ red urine then reassure the patient that this is normal for the drug.
NB 2. TB patients are told the benefits of an HIV test. If the patient is HIV positive, Cotrimoxazole preventive treatment is recommended. If a new widespread or blistering – skin rush stop the drug and refer urgently to a Medical Officer.)

- **Enter** the current and next date of appointment on TB card & inform patient.

Identify Absentee and Retrieve the Patient

Recognising Missing Patients

IDENTIFY THE (ABSENTEE) PATIENT:

☞ And act to retrieve the patient:

- Missing two days of TB drugs will be identified by the community volunteer, if so:
  - ☞ The community volunteer will visit the patient and convince/ help him/her to continue treatment without interruption, but if this fails, he/ she will
  - ☞ Inform the SCHW; to talk with the family member and community leader who chaired the community meeting, e.g. chair of the LC or PDC.
- The SCHW visits every 2 or 4 weeks, and checks adherence, if poor,
  - ☞ Discuss with the patient and try to convince/ help the patient, but if no effect
  - ☞ Discuss with the family member(s) and the community leader who attended the community meeting, try to convince/help the patient, but if no effect then
  - ☞ Inform the DTLS (the contact/ telephone number is ___________________)
- The treatment centre clinician acts if the patient fails to attend at the 2 (3), 5 and 8 month follow-up.
  - ☞ Contact the SCHW to visit, and if this fails then contact the DTLS
- If the patient returns after a default of more than **4 weeks**, then send a **sputum** specimen to the laboratory
  - ☞ Decide on the action according to the table on page 20.

NB. In TB patients known to be HIV positive, also on Cotrimoxole ask about cotrimoxazole preventive treatment. If taken, ask about adherence, and count the tablets remaining in the packet.

Following-up at Treatment Centre by Clinician

Review of Sputum Smears and Treatment

FOLLOWING-UP TB PATIENT AT TREATMENT CENTRE (at 2 (3), 5 and 8 months when sputum smears & treatment review are required

- **Ask about and examine** the patient's general health including weighing
  - If difficult breathing or is acutely ill, give urgent treatment and refer
  - Treat for common infections, including HIV-related
  - Explain the benefits of an HIV test and if positive start cotrimoxazole preventive treatment 2 tablets (480mg) daily, explain it is long term to prevent chest and gut infections that are common in people with HIV
- **Review** and respond to the side effects, if any reported or found (page 18)
- **Review** adherence to treatment from the TB treatment card, and if a problem take action (see page 27 above), also ask about cotrimoxazole adherence
- Get **sputum** examined, review the results and **manage** as follows:

Starting continuation phase of treatment:

Category of Patient	Sputum result at end of 2 (or 3) months	Management
Category 1	Negative at end of 2 months	Start continuation phase treatment
	Positive at end of 2 months	Continue intensive phase treatment for 1 more month Start the continuation phase at 3 months Re-examine sputum at end of 5 months
Category 2	Negative at end of 3 months	Start continuation phase treatment
	Positive at end of 3 months	Continue intensive phase treatment for 1 month Re-examine sputum at end of month 5 If negative, start continuation phase If positive, register as a failure, but continue treatment to end of 8 months
Category 3 (child up to 12 years)	Negative at end of 2 months	Start continuation phase treatment
	Positive at end of 2 months	Repeat sputum smear to confirm positive Seek advice/ refer to Medical Officer.

Managing patients found not responding to TB drugs at 5 – 8 months

Category of Patient	Sputum result at 5 or 8 months	Management
Category 1	Positive	Repeat sputum smear to confirm positive Declare failure, if smear-positive confirmed Re-register & start treatment as Category-2 patient
Category 2	Positive	Repeat sputum smear to confirm positive Declare failure, if positive sputum confirmed Continue treatment for eight months

If sputum positive at 5 months (treatment failure) do a sputum culture and sensitity if available.

- **Explain to the patient and Update** the data on TB treatment card and unit TB register (i.e. sputum result; drug prescribed; and date of next sputum exam)

Managing TB Patient with Interrupted Treatment

Scheme for Managing TB Treatment Interruption

Actions in interruption of TB treatment

- Carefully question the patient and look at the TB treatment card; decide the number of weeks of treatment missed

Interruption of less than 4 weeks:

- Trace the patient
- Solve the cause of the interruption
- Continue treatment and prolong it to compensate for missed doses

Interruption of between 4 - 8 weeks

<table>
<tr><th>Action</th><th>Sputum Result</th><th colspan="2">Decision</th></tr>
<tr><td rowspan="3">• Trace patient
• Solve the cause if possible
• Do 3 sputums, Continue treatment while waiting for results</td><td>All sputum NEG or Extra Pulmonary TB</td><td colspan="2">Continue treatment and prolong it to compensate for missed doses</td></tr>
<tr><td rowspan="2">One or more sputum POS</td><td>Treatment < 5 months</td><td>Continue treatment and prolong it to compensate for missed doses</td></tr>
<tr><td>> 5 months</td><td>If Cat 1 – start Cat 2
If Cat 2 – refer (as may become chronic TB)</td></tr>
</table>

Interruption of 8 or more weeks (defaulter)

<table>
<tr><th>Action</th><th>Sputum Result</th><th colspan="2">Decision</th></tr>
<tr><td rowspan="3">• Trace patient
• Solve the cause
• Do 3 sputums, No treatment while waiting for results</td><td>All sputum NEG or Extra Pul smear TB</td><td colspan="2">Medical Officer decision on an individual basis whether to restart or continue treatment, or no further treatment</td></tr>
<tr><td rowspan="2">One or more sputum Smear POS</td><td>Category 1</td><td>Start Category 2</td></tr>
<tr><td>Category 2</td><td>Refer (as may become chronic TB)</td></tr>
</table>

** A patient must complete all 56 doses of the initial intensive phase. For example, if a patient has to continue his previous treatment and he took 4 weeks of treatment (28 doses) before interrupting, he will have 4 more weeks (28 doses) of the intensive phase to take. He will then start the continuation phase of treatment.*

*** A patient who must "start" again will restart a full 8 (6 if child) months of treatment.*

Decide the Treatment Outcomes by Clinician

Review TB Treatment Card and Unit Register

DECLARING TREATMENT OUTCOMES

- The clinician at the treatment centre declares treatment outcome for registered TB patients, on basis of TB treatment card and unit TB register information
- The treatment centre health worker responsible records their comments as defaulted, died and completed TB cases in "remarks" section of TB card
- Decide and record in the unit register the treatment outcomes according to the table below.

<table>
<tr><td>Cure</td><td colspan="2">Smear positive patient who is smear-negative in the last month of treatment and on at least one previous occasion.</td></tr>
<tr><td rowspan="2">Treatment completed*</td><td>Smear-positive pre-treatment</td><td>Completed treatment but who did not have a check sputum smear result</td></tr>
<tr><td>Smear-negative pre-treatment</td><td>Who completed treatment</td></tr>
<tr><td>Treatment failure</td><td colspan="2">Patient who is sputum POSITIVE at 5 months or later during treatment**</td></tr>
<tr><td>Died</td><td colspan="2">Patient who dies for any reason during the course of TB treatment</td></tr>
<tr><td>Default</td><td colspan="2">Patient whose treatment was interrupted for 2 or more consecutive months</td></tr>
<tr><td>Transfer out</td><td colspan="2">Patient who has been transferred to another recording and reporting unit and for whom the treatment outcome is not known</td></tr>
</table>

*Treatment success is defined at the sum of patients cured and those who have completed treatment.
** Either smear-positive or smear-negative pre-treatment

The DTLS will record the treatment results from all the unit registers in the district TB register, and quarterly returns made for smear-positive and smear-negative patients. These are very important for monitoring the TB programme locally and nationally.

Ensuring Quality CB-DOTS

Review Meeting at Health Facility

WORKING TOGETHER AT HEALTH FACILITY:

- A monthly or quarterly **CB-DOTS review meeting** may be held at the HSD.
- The participants will include DTLS, In-charge HSD and SCHW's, health worker/ clinicians and laboratory technicians.
- The review is conducted in a form of participatory discussion to identify problems and take collective decisions.
- The CB-DOTS review may **include** all/any of the following areas:

✓ Laboratory functioning
✓ Categorization and prescription practices
✓ Monitoring the case finding, sputum conversion and treatment outcomes
✓ Contact screening and management
✓ DOT Management
✓ Follow-up of registered TB patients
✓ Patient compliance and defaulter tracing
✓ Record maintenance
✓ Availability of resources

MONITORING CARE DELIVERY AT HEALTH FACILITIES

- Each quarter the case finding, sputum conversion and treatment outcomes reports will be prepared by DTLS and these will be discussed with the DDHS and In-charges of the HSD, as well as be reported to the Zonal and National TB and Leprosy Programme Manager.