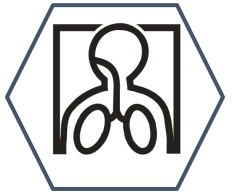
Training of Directly Observed Therapy (DOT) Providers

END TB

NPTCCD

National Programme for Tuberculosis Control and Chest Diseases, Sri Lanka

Outline of the training



- DOTS and DOT – Are they the same?
- Importance of DOT.
- Who is a DOT provider?
- What are your duties as a DOT provider?
- How to mark the DOT card.
- What you should be looking for during the period of treatment.
- How to store drugs.
- What should you do if the patient does not come for treatment.
- What to do when the treatment is over.
- Communication with the District Chest Clinic

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DOTS – Directly Observed Treatment Short course

A strategy to control TB There are five components

1. Government commitment to sustained TB control
2. Detection of TB cases through sputum smear microscopy of symptomatic patients presenting at health facilities
3. Regular and uninterrupted supply of good quality anti-TB drugs
4. Short-course chemotherapy given under direct observation by a health worker or a trained person
5. Recording and reporting system

Aims,

- to monitor treatment progress and
- to evaluate the outcome of every patient treated and the overall performance of the programme

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DOT – Directly Observed Therapy

A component of DOTS

This ensures a TB patient has taken his treatment as prescribed

DOT is a supportive mechanism that ensures the best possible results in treatment of TB

Direct observation ensures treatment

- ❖With the right drugs
- ❖In the right doses
- ❖At the right intervals
- ❖For the correct duration

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Why do we provide DOT?

- More than one third of the patients (39%) receiving self-administered treatment do not adhere to treatment

  whereas only 10% of patients on DOT do not adhere.
- Impossible to predict which patients will take medicines.
- DOT is necessary at least in the initial phase of treatment to ensure adherence and achieve sputum smear conversion.
- A TB patient missing one attendance can be traced immediately and counselled.

Why do we provide DOT?

- Helps patient to complete TB therapy as quickly as possible, without unnecessary gaps.
- Helps prevent TB from spreading to others;
- decreases the risk of drug-resistance resulting from erratic or incomplete treatment;
- decreases the chances of treatment failure and relapse.

Special attention in the treatment of patients ,

- People with poor family support,
- loners,
- alcoholics,
- substance abusers, smokers
- mentally handicapped patients,
- prison inmates and other institutionalized individuals
- patients with poor social and educational backgrounds
- Previously treated patients and
- patients receiving second line anti TB drugs.

Who is a DOT provider?

- A DOT provider's main responsibility is;
  to help the patient to take the **treatment regularly**
  by **direct observation** of intake of **each dose daily**
  along with **proactive monitoring** of **adverse effects**
  and **psychological support**, thereby **ensuring adherence**.

- DOT provider must be
  - accessible
  - acceptable

  } to the patient

  - accountable

  } to the health system

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Who could be a DOT provider?

- Health care workers – curative, preventive in both state and private sector
- Religious Leaders
- Community Leaders
- Heads of Institutions
- NGOs/CBOs
- Cured TB patients
- Any person of responsibility
- Family member – usually not recommended . However, “A responsible family member” in certain instances can act as a DOT provider

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What are your duties as a DOT provider?

- Deliver the prescribed medication
- Checking for side effects
- Ensure swallowing of the drugs by the patient in front of you
- Correct maintenance of TB treatment card (TB 01), DOT card and DOT Register
- Answer any questions

Provide prioritized treatment to a TB patient in a busy health care setting (do not keep them wait in a queue)

If the patient cannot come daily to see you, you can give the drugs to the hand of the patient for a maximum of 3 days.

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What are your duties as a DOT provider? Cont…

- Follow up patients who miss a dose of treatment
- Be knowledgeable on possible adverse reactions due to Anti TB drugs, their early identification and when and where to refer them.
- Give health education to patient and family
- Ensure the contacts of a TB patient are screened
- Notify the District Chest Clinic if
  - the patient has side effects,
  - clinical problems or
  - misses DOT visits

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Contacts of a TB patient

- Any person who has been regularly exposed to an index case of TB should be screened.

This includes all the household contacts & other close contacts.

Following contacts are at a higher risk of developing TB.

✓Children less than 5years living with the patient

✓Elderly more than 60 years living with the patient

✓Patients with kidney disease

✓Patients with diabetes

✓All HIV positive patients

✓Immunocompromised individuals (Cancer patients etc.)

✓Patients on immune-suppressive drugs such as long-term steroid therapy (organ transplant patients etc.)

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Contacts of a TB patient cont.

✓ People living under risk environments (e.g. slums, estates, internally displaced, migrants, homeless people)

✓ Current and former workers in workplaces with silica exposure

✓ Migrant population and returning refugees

✓ If the patient is an inmate of an institution in congregate settings all the contacts should be screened

E.g.: Prisoners

Inmates of elderly homes

Inmates of destitute homes

Inmates of rehabilitation centers

✓ Healthcare workers

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Anti Tuberculous Treatment (ATT)

Case Definition	Treatment Category	Treatment Regimen	
		Intensive Phase	Continuation Phase
New cases • Pulmonary • Extrapulmonary TB	New	2 HRZE – (4 drugs for 2 months)	4 HR – (2 drugs for 4 months)
Previously treated cases without drug resistance • Relapses • Treatment after failure • Treatment after loss to follow-up • Other previously treated cases	Retreatment	3HRZE(4 drugs for 3 months)	5 HRE(3 drugs for 5 months)

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DOT Card (TB 1 card)

- Two DOT (02) cards are made for each patient for the following purposes.

➢ Patient's File

➢ Dot provider

Some practice – 3rd card. In the hands of patient – useful in situations where a patient gets admitted to a ward in an emergency.

Gives information on duration of treatment.

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Who is initiating the DOT card?

- At the point of registration

  Usually, a Nursing Officer starts DOT card and fills up the basic patient information at the DCC.

- The Medical Officer who initiates the patient on DOT will complete the patient's clinical information on the card.

- Usually, the PHI who assigns a patient to a DOT centre will complete the balance information in the card and make 2 exact copies of that card to complete the process.

One of these cards will be given to you with the drugs by the PHI.

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Make sure the following information is available on the DOT card and understand the content.

- Name and contact details of the patient
- District TB no. & patient category
- Correct DOT provider information
- Results of the sputum examination
- Drugs & their dosage
- Remarks: expected date to visit or any other information

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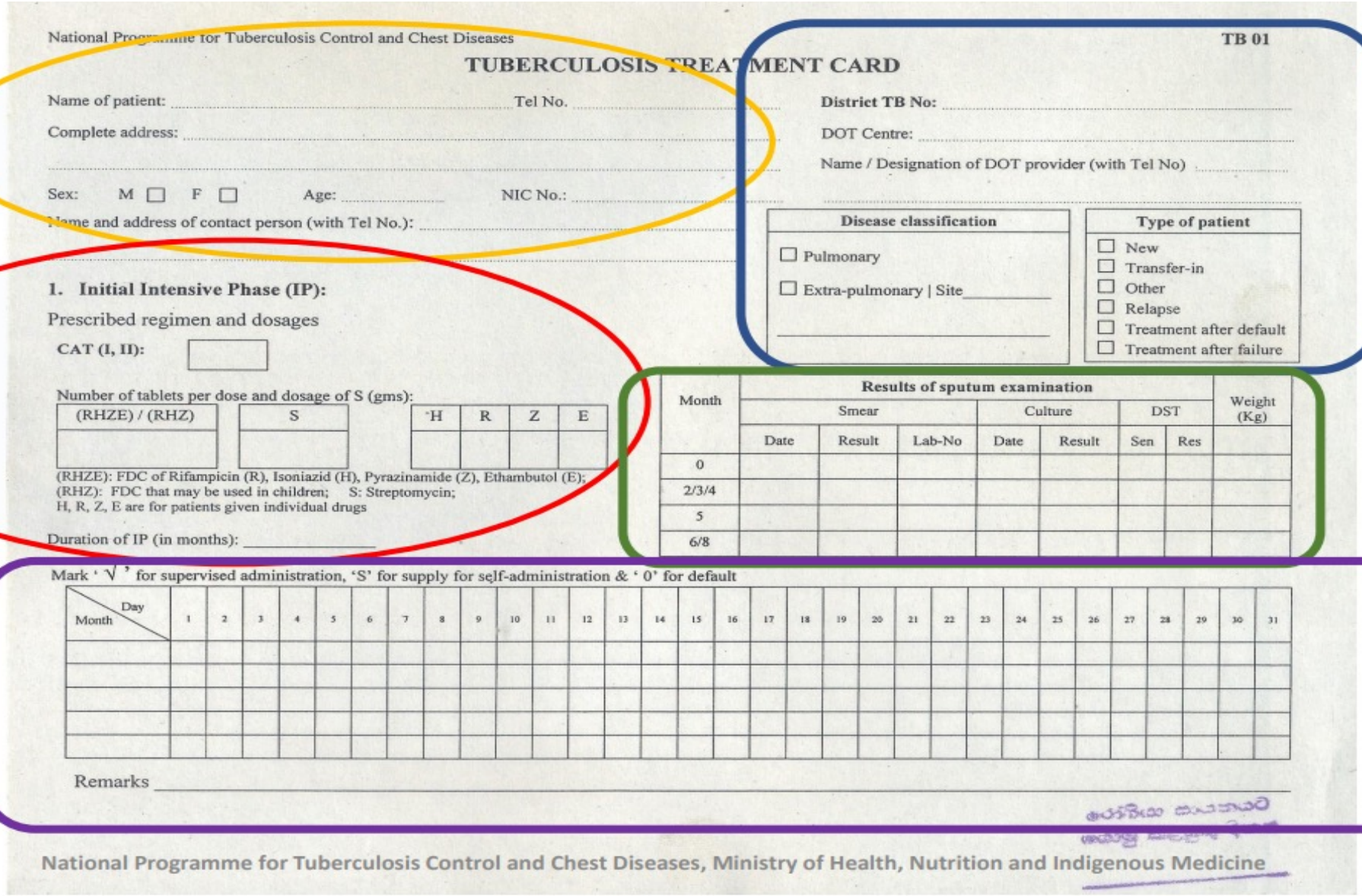


National Programme for Tuberculosis Control and Chest Diseases

TB 01

TUBERCULOSIS TREATMENT CARD

Name of patient: ..... Tel No. .....

Complete address: .....

Sex: M ☐ F ☐ Age: ..... NIC No.: .....

Name and address of contact person (with Tel No.): .....

District TB No: .....

DOT Centre: .....

Name / Designation of DOT provider (with Tel No) .....

Disease classification	Type of patient
☐ Pulmonary	☐ New
☐ Extra-pulmonary | Site_____	☐ Transfer-in
	☐ Other
	☐ Relapse
	☐ Treatment after default
	☐ Treatment after failure

1. Initial Intensive Phase (IP):

Prescribed regimen and dosages

CAT (I, II): ☐

Number of tablets per dose and dosage of S (gms):

(RHZE) / (RHZ)	S	H	R	Z	E

(RHZE): FDC of Rifampicin (R), Isoniazid (H), Pyrazinamide (Z), Ethambutol (E);
(RHZ): FDC that may be used in children; S: Streptomycin;
H, R, Z, E are for patients given individual drugs

Duration of IP (in months): _____

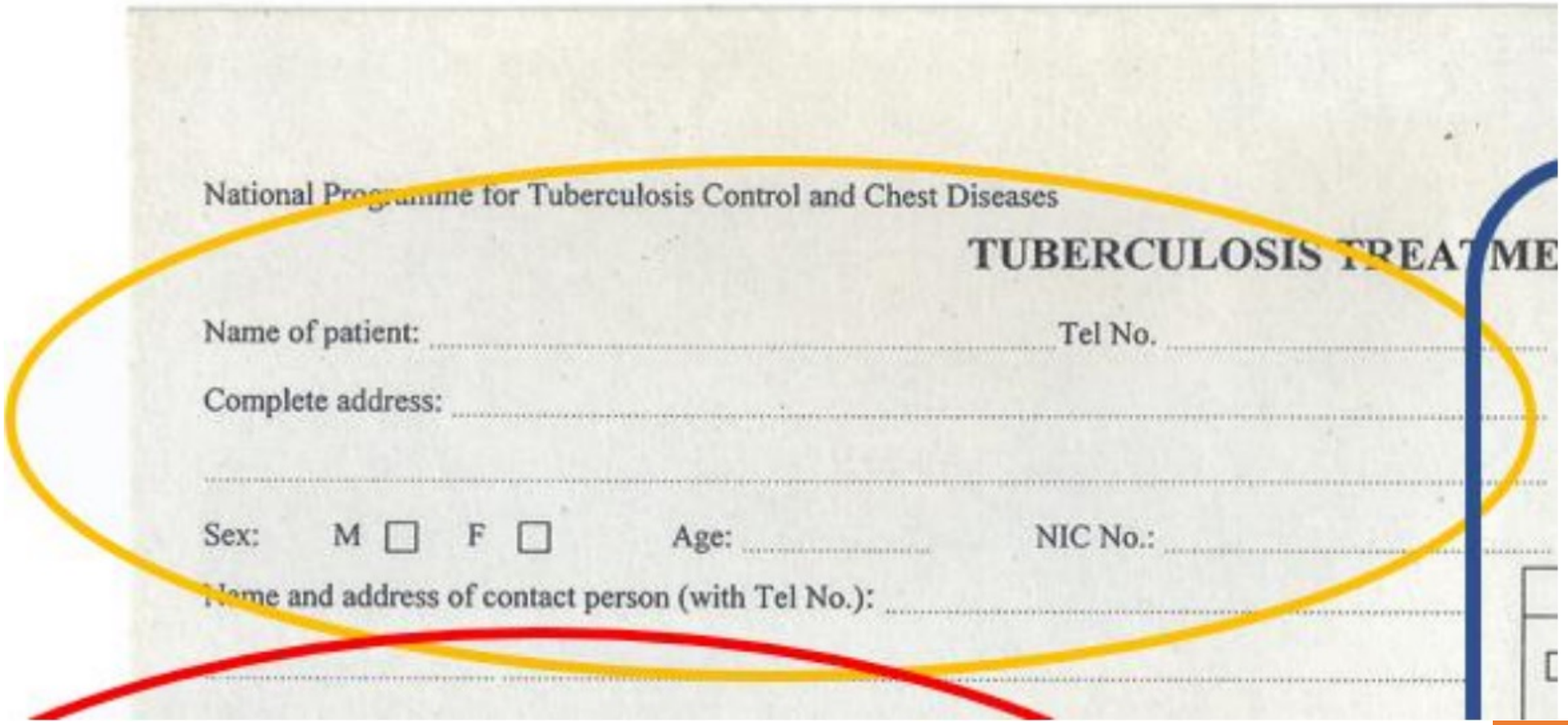
Month	Results of sputum examination							Weight (Kg)
	Smear			Culture		DST		
	Date	Result	Lab-No	Date	Result	Sen	Res	
0								
2/3/4								
5								
6/8								

Mark ' √ ' for supervised administration, 'S' for supply for self-administration & ' 0' for default

Month \ Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Remarks _____

National Programme for Tuberculosis Control and Chest Diseases, Ministry of Health, Nutrition and Indigenous Medicine


National Programme for Tuberculosis Control and Chest Diseases

TUBERCULOSIS TREATME

Name of patient: ..... Tel No. .....

Complete address: .....

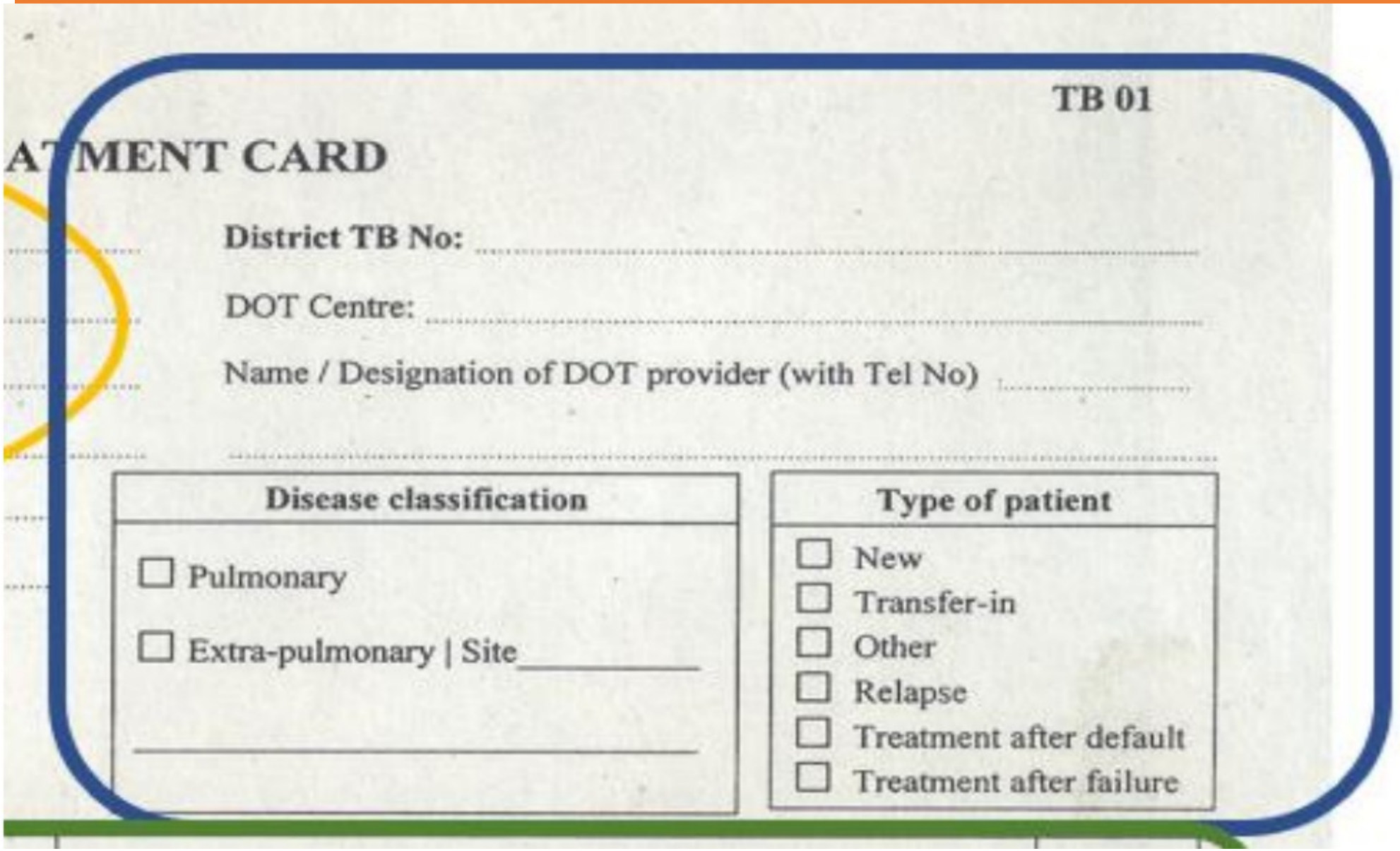
.....

Sex: M ☐ F ☐ Age: ..... NIC No.: .....

Name and address of contact person (with Tel No.): .....

.....

NPTCCD



TB 01

AT MENT CARD

District TB No: .....

DOT Centre: .....

Name / Designation of DOT provider (with Tel No) .....

.....

Disease classification	Type of patient
☐ Pulmonary	☐ New
☐ Extra-pulmonary | Site_____	☐ Transfer-in
_____	☐ Other
	☐ Relapse
	☐ Treatment after default
	☐ Treatment after failure

NPTCCD

1. Initial Intensive Phase (IP):

Prescribed regimen and dosages

CAT (I, II): ☐

Number of tablets per dose and dosage of S (gms):

(RHZE) / (RHZ)	S

H	R	Z	E

(RHZE): FDC of Rifampicin (R), Isoniazid (H), Pyrazinamide (Z), Ethambutol (E);
(RHZ): FDC that may be used in children; S: Streptomycin;
H, R, Z, E are for patients given individual drugs

Duration of IP (in months): _____

NPTCCD

Month	Results of sputum examination							Weight (Kg)
	Smear			Culture		DST		
	Date	Result	Lab-No	Date	Result	Sen	Res	
0								
2/3/4								
5								
6/8								

Mark ' √ ' for supervised administration, 'S' for supply for self-administration & ' 0' for default

Month \ Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Remarks _____

National Programme for Tuberculosis Control and Chest Diseases — TB 01

TUBERCULOSIS TREATMENT CARD

Name of patient: Mr. A.T. Tel No. 072-710388 District TB No: 16/c/260

Complete address: 13/42/A2 Serpentine Road, colombo -08

DOT Centre: CD- Wanathamulla

Name / Designation of DOT provider (with Tel No) Dispensar

Sex: M ☑ F ☐ Age: 52y. NIC No.:

Name and address of contact person (with Tel No.): Mrs. K. T. as above - 0716-800792

Disease classification
- ☑ Pulmonary
- ☐ Extra-pulmonary | Site

Type of patient
- ☑ New
- ☐ Transfer-in
- ☐ Other
- ☐ Relapse
- ☐ Treatment after default
- ☐ Treatment after failure

1. Initial Intensive Phase (IP):

Prescribed regimen and dosages

CAT (I, II): I

Number of tablets per dose and dosage of S (gms):

(RHZE) / (RHZ)	S	H	R	Z	E
(2) tab.	-				

(RHZE): FDC of Rifampicin (R), Isoniazid (H), Pyrazinamide (Z), Ethambutol (E);
(RHZ): FDC that may be used in children; S: Streptomycin;
H, R, Z, E are for patients given individual drugs

Duration of IP (in months): 02.

Month	Results of sputum examination							Weight (Kg)
	Smear			Culture		DST		
	Date	Result	Lab-No	Date	Result	Sen	Res	
0	07/02	2+	NHRD					31Kg.
2/3/4								
5								
6/8								

Mark '√' for supervised administration, 'S' for supply for self-administration & '0' for default

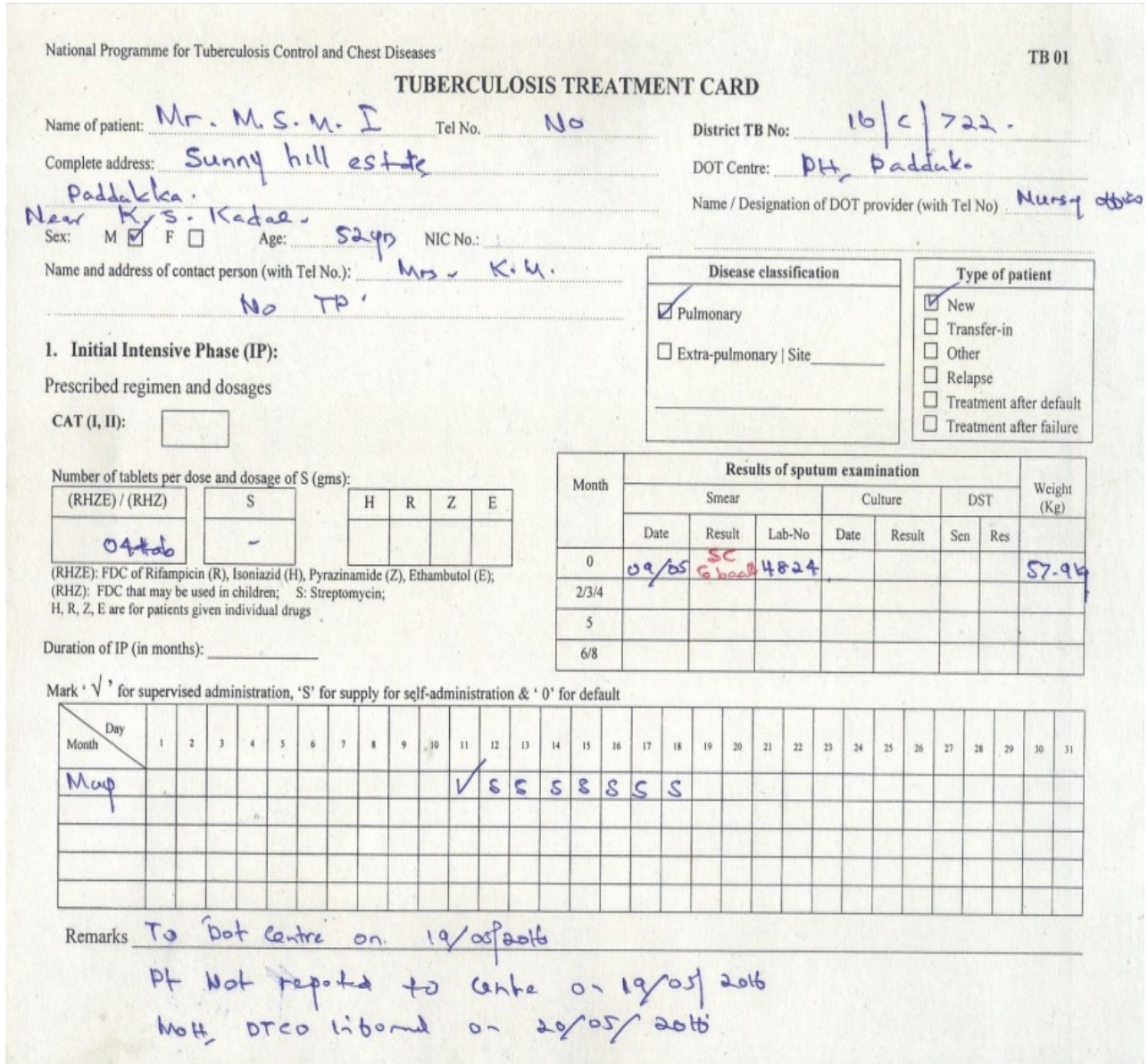
Month \ Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Feb.								←	.	.	.	NHRD.					→ √	S	S	S	S	S									

Remarks Will report to Dot centre on 23/02/2016

Mark '√' for supervised administration, 'S' for supply for self-administration & '0' for default

Month \ Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Feb.								←	.	.	.	NHRD.					→ √	S	S	S	S	S									

Remarks Will report to Dot centre on 23/02/2016



National Programme for Tuberculosis Control and Chest Diseases

TB 01

TUBERCULOSIS TREATMENT CARD

Name of patient: Mr. M.S.M.I Tel No. No

Complete address: Sunny hill estate Paddakka. Near K.S. Kadai.

Sex: M ☑ F ☐ Age: 52yrs NIC No.:

Name and address of contact person (with Tel No.): Mrs. K.M. No TP.

District TB No: 16/c/722.

DOT Centre: PH, Paddak.

Name / Designation of DOT provider (with Tel No) Nursy office

Disease classification

☑ Pulmonary

☐ Extra-pulmonary | Site_____

Type of patient

☑ New
☐ Transfer-in
☐ Other
☐ Relapse
☐ Treatment after default
☐ Treatment after failure

1. Initial Intensive Phase (IP):

Prescribed regimen and dosages

CAT (I, II):

Number of tablets per dose and dosage of S (gms):

(RHZE) / (RHZ)	S	H	R	Z	E
04tab	-				

(RHZE): FDC of Rifampicin (R), Isoniazid (H), Pyrazinamide (Z), Ethambutol (E);
(RHZ): FDC that may be used in children; S: Streptomycin;
H, R, Z, E are for patients given individual drugs

Duration of IP (in months): _____

Month	Results of sputum examination							Weight (Kg)
	Smear			Culture		DST		
	Date	Result	Lab-No	Date	Result	Sen	Res	
0	09/05	SC Sobad	4824					57.9kg
2/3/4								
5								
6/8								

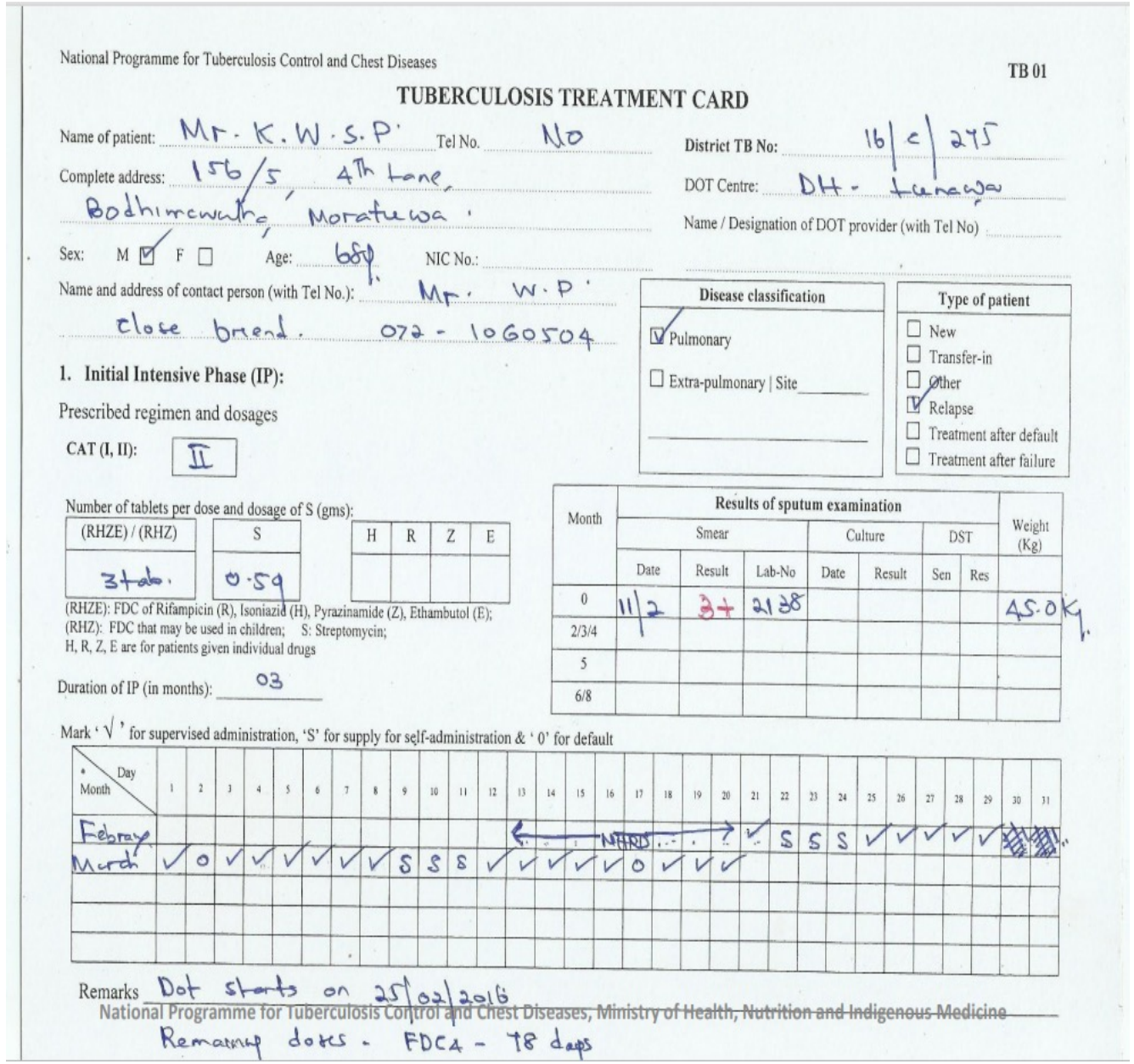
Mark '√' for supervised administration, 'S' for supply for self-administration & '0' for default

Month \ Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
May											√	S	S	S	S	S	S	S													

Remarks To Dot Centre on 19/05/2016

Pt Not reported to Centre on 19/05/2016

MoH, DTCO informed on 20/05/2016



National Programme for Tuberculosis Control and Chest Diseases

TB 01

TUBERCULOSIS TREATMENT CARD

Name of patient: Mr. K.W.S.P. Tel No. No

Complete address: 156/5, 4th Lane, Bodhimawatha, Moratuwa.

District TB No: 16/c/275

DOT Centre: DH - Lunawa

Name / Designation of DOT provider (with Tel No)

Sex: M ☑ F ☐ Age: 68y NIC No.:

Name and address of contact person (with Tel No.): Mr. W.P. close brend. 072 - 1060504

Disease classification

☑ Pulmonary

☐ Extra-pulmonary | Site _____

Type of patient

☐ New
☐ Transfer-in
☐ Other
☑ Relapse
☐ Treatment after default
☐ Treatment after failure

1. Initial Intensive Phase (IP):

Prescribed regimen and dosages

CAT (I, II): II

Number of tablets per dose and dosage of S (gms):

(RHZE) / (RHZ)	S	H	R	Z	E
3tab.	0.5g				

(RHZE): FDC of Rifampicin (R), Isoniazid (H), Pyrazinamide (Z), Ethambutol (E);
(RHZ): FDC that may be used in children; S: Streptomycin;
H, R, Z, E are for patients given individual drugs

Duration of IP (in months): 03

Month	Results of sputum examination							Weight (Kg)
	Smear			Culture		DST		
	Date	Result	Lab-No	Date	Result	Sen	Res	
0	11/2	3+	2138					45.0 Kg.
2/3/4								
5								
6/8								

Mark '√' for supervised administration, 'S' for supply for self-administration & '0' for default

Month \ Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Febray													←	NTBD							?	✓	S	S	S	✓	✓	✓	✓	✓	✓
March	✓	0	✓	✓	✓	✓	✓	✓	S	S	S	✓	✓	✓	✓	✓	0	✓	✓	✓											

Remarks Dot starts on 25/02/2016

Remaining doses - FDC4 - 78 days

What you should be looking for during the period of treatment?

- Ensure swallowing of drugs
- Encourage them on a balanced diet
  - E.g.: additional meal, adding eggs and milk to the diet whenever possible
- Look out for possible adverse reactions due to Anti TB drugs
- Reassure regarding minor side effects (If you are in doubt, please contact a doctor).

How can a DOT provider build rapport and trust?

1. Get to know your patient better.
2. Protect confidentiality.
3. Non -discrimination.
4. Communicate clearly.
5. Avoid criticizing the patient's behavior; respectfully offer helpful suggestions for change.
6. Be on time and be consistent.
7. Adopt and reflect a nonjudgmental attitude.

(Be receptive and provide possible support; linking with social support, incentives etc.)

Side effects of ATT

- Minor side effects

- Pink or yellow coloured urine , joint pains , mild itching , etc

- Major side effects

Liver - persistent nausea , vomiting, yellow coloured urine, yellow eyes

Skin - itching with rashes

Eyes - change in vision

CNS - tinnitus , vertigo , gait related problems

When to refer the patient back to the chest clinic

- At detection of any of the above major side effects
- On completion of intensive phase, i.e. 60 days for a newly diagnosed patient or 90 days for a re-treatment patient

IP – daily DOT

CP – at least weekly DOT

Previously treated – daily DOT through out

How to store drugs

- As the DOT provider, you will have to store the drugs with you.
- Provided by DCC usually for one month on patient basis.
- But, if storage conditions not satisfactory, drugs will be issued only for two weeks
- Drugs for each patient should be kept separately.
- should be stored in a secured store -room and protected from unauthorized access.
- Should be protected from direct sun light, heat, light moisture/ rain, dust, pests and fire.
- There should be circulation of air between the storage boxes.
- Be vigilant on any possible colour change, date of expiry etc. of the drugs.

  If observed, report to DCC.

What can you do if the patient does not come for treatment

- Should call the patient/ relative and bring him back for treatment on the same day.
- If it fails, give the patient the chance to come back for his treatment at his earliest, probably the next day.
- If it fails/ if the patient cannot be contacted on day 1 itself, promptly inform the DCC PHI and the DTCO.

Communication with the District Chest Clinic

- DOT provider must

- Know the contact details of the DTCO or any MO at the DCC

- Return completed TB 01 that the Dot provider maintained on completion of the treatment course

- Return any remaining drugs of a patient who has interrupted treatment

For any information, contact your district chest clinic or the NPTCCD:

Address : No. 555, Public Health Building Complex,
Elvitigala Mawatha,
Colombo 5

Telephone : 0112 - 368276

Fax : 0112 – 368276

Email : dirnptccd@health.gov.lk
nptccddirector@gmail.com