

MANAGEMENT OF PULMONARY AND LYMPH NODE TUBERCULOSIS IN CHILDREN, IN THE PRIVATE SECTOR IN MUMBAI



Tata Institute of Social Sciences
Deonar, Mumbai 400088

INTRODUCTION AND INFORMED CONSENT FORM

To,
Dr. _____,

Hello, my name is Dr. Carolyn Tauro. I am studying Master of Public Health at Tata Institute of Social Sciences (TISS), Deonar. As part of the course I am required to do a dissertation. I will be studying the management of childhood TB in the private sector and need your help for this. Your participation and contribution towards this study will be very valuable.

The study will be a cross sectional one involving paediatricians in Mumbai. The questionnaire will take about half an hour to answer and can be filled in at your convenience. All information you provide will be kept strictly confidential with no revelation of your identity in any manner. Participation in this survey is voluntary and if you choose to participate, you may withdraw at any time. Although answering this questionnaire may not benefit you directly, it will contribute greatly toward the management of tuberculosis in the field of public health. There will be no compensation given for participation. However, I hope that you will take part in this survey since your participation is important.

You are free to ask me any questions before making your decision. You may also contact my research guide, Dr. Nilesh Gawde, in case of any further query, on nilesh.gawde@tiss.edu. In case of query while answering the questionnaire, you may contact me on ck.tauro@gmail.com.

Consent note from Dr. _____

I, Dr. _____, have read the above details of the study. I am aware that this study is based on the management of childhood TB in the private sector.

I have clarified any doubts that I had and I consent to participate in this study.

Date: _____

Signature of participant: _____

Serial no.: _____

Name of participant: _____

Questionnaire for Paediatricians treating TB in the private sector

Serial no. _____

SECTION I: GENERAL DETAILS

- (i) Age: _____ years
- (ii) Qualification: _____
- (iii) Total number of years of experience: _____ years
- (iv) Experience:
 - (a) Private practice _____ years
 - (b) Government practice _____ years
 - (c) Charitable trust/NGO _____ years
 - (d) Academic Institution _____ years

SECTION II: DIAGNOSIS

(1) When do you suspect tuberculosis in a child?

History of: _____

Physical examination - _____

(2) When I suspect a child with ***Pulmonary tuberculosis***, I send the following investigation(s) for work up: (*Which of these would you advise in all patients and which for only some patients? Please explain in which condition you would ask for investigations only in some patients*)

In order of preference	Name of investigation	For all patients (please tick - ✓)	For some patients (please tick - ✓)	If for some, explain for which condition
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

(3) Do you ask for Immunoglobulin testing? (*Skip this question and move to Qn. (4) if already included Immunoglobulin testing above*).

- A. Yes, I do. It is important because _____
- B. No, I do not

(4) If a child's X-ray is suggestive of tuberculosis, what do you do next?

- A. Start treatment for Pulmonary TB
- B. Do a sputum smear test and then start treatment
- C. Do a CBC and ESR and then start treatment
- D. Do a Mantoux test and then start treatment
- E. Do _____ (please specify test) and then start treatment

- (5) In children who aren't able to produce sputum, what do you do next?:
 - A. Start treatment anyway
 - B. Do a CBC and ESR and then start treatment
 - C. Do a Mantoux test and then start treatment
 - D. Induce sputum by Gastric lavage or Bronchial alveolar lavage and send for sputum testing and then start treatment
 - E. Do _____ (please specify test) and then start treatment

- (6) In all children with tuberculosis, I further test for HIV:
 - A. Yes, I do
 - B. No, I do not
 - C. I do, only in some children, depending on case history

- (7) When a child is diagnosed with having TB, I
 - A. treat the patient myself
 - B. refer the patient to nearest Government hospital
 - C. refer the patient to a TB expert

(8) When I suspect a child with **Lymph node TB**, I send the following investigation(s) for work up: (*Which of these would you advise in all patients and which for only some patients? Please explain in which condition you would ask for investigations only in some patients*)

In order of preference	Name of investigation	For all patients (please tick - ✓)	For some patients (please tick - ✓)	If for some, explain in which patients
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

SECTION III: TREATMENT

- (9) For children exposed to an infectious case of tuberculosis in their family, I advise one or more of the following (Tick as many as applicable):
 - A. Keep away child from the infectious person(s)
 - B. Screen the child and treat if tuberculosis is diagnosed
 - C. Screen other family members for tuberculosis
 - D. Screen the child and then give chemoprophylaxis with general antibiotics for 2 weeks
 - E. Screen the child and then give chemoprophylaxis with Isoniazid for 6 months
 - F. Nothing needs to be done
 - G. Change in diet
 - H. Others (please specify): _____

(10) What is the average number of new cases of TB you register for treatment in a month? _____

(11) What is the average number of new cases of MDRTB you register for treatment in a month? _____

(12)How do you treat a child with tuberculosis?

(Specify the names of the drugs you use, the number of phases and dosages of the medicines)

Treatment episode number	Phase (intensive,IP/Continuation,CP)	Name of drugs (use symbol)	Dosage (mg/kg)
1 st			
If first treatment fails...			
2 nd			
If second treatment fails...			
3 rd			
Codes for some drugs: Cm- Capreomycin, Cf- Ciprofloxacin, Clr – Clarithromycin, Cs- Cycloserine, E – Ethambutol, Eto- Ethionamide, H- Isoniazide (INH), Lzd – Linezolid, Lf- Levofloxacin, Mfx – Moxifloxacin, Of- Ofloxacin, Z – Pyrazinamide, P- Para amino salicylic acid (PAS), Pto – Prothionamide, R-Rifampicin, Rf – Rifabutin, S- Streptomycin, Tzd – Terizidone, T – Thioacetozone, Tzn - Thioridazine, Arginine (Arg)			

(13)At what frequency do you prescribe medications?

A. Daily

B. On alternate days

(14)Do you advise interruption of treatment in the presence of side effects?

A. Yes, I do go to Qn. (15)

B. No, I do not go to Qn. (16)

(15)If you do advise interruption of treatment, please specify:

- For which side effects and for what time period?

- (i) _____
- (ii) _____
- (iii) _____

(16) Do you advise change in regimen in the presence of side effects?

A. Yes, I dogo to Qn. (17)

B. No, I do not go to Qn. (18)

(17) If you do advise, change in regimen, please specify:

- For which side effects and what change in regimen?

- (i) _____
- (ii) _____
- (iii) _____

(18) Do you ever use steroids in children with tuberculosis?

A. Yes, I use steroids in children with (please specify condition):

B. No, I never use steroids.

(19) When I am certain that a patient is not likely to be adherent, I choose the following drug regimen:

A. The same regimen as mentioned in Qn. (12).

B. _____

(20) For children with TB, also co-infected with HIV, the regimen I prescribe is:

A. The same regimen as mentioned in Qn. (12).

B. Phase (IP/CP)	Name of drugs (use symbol)	Dosage (mg/kg)

Codes for some drugs: Cm- Capreomycin, Cf- Ciprofloxacin, Clr – Clarithromycin, Cs- Cycloserine, E – Ethambutol, Eto- Ethionam, H- Isoniazide (INH), Lzd – Linezolid, Lf- Levofloxacin, Mfx – Moxifloxacin, Of- Ofloxacin, Z – Pyrazinamide, P- Para amino salicylic acid (PAS), Pto – Prothionamide, R-Rifampicin, Rf – Rifabutin, S- Streptomycin, Tzd – Terizidone, T – Thioacetoazone, Tzn - Thioridazine, Arginine (Arg)

(21) In case of co-morbidities with any of the following diseases, what changes to you make in the regimen:

A. I do not make any changes in the regimen

B.

Disease	Phase (intensive, IP/Continuation, CP)	Change in regimen Use symbols	Dosage (mg/kg) (specify dosage, only if different from that mentioned above)
Diabetes			
Liver Disease			
Renal Disease			
Pneumonia			
Malnutrition			

Codes for some drugs: Cm- Capreomycin, Cf- Ciprofloxacin, Clr – Clarithromycin, Cs- Cycloserine, E – Ethambutol, Eto- Ethionamide, H- Isoniazide (INH), Lzd – Linezolid, Lf- Levofloxacin, Mfx – Moxifloxacin, Of- Ofloxacin, Z – Pyrazinamide, P- Para amino salicylic acid (PAS), Pto – Prothionamide, R-Rifampicin, Rf – Rifabutin, S- Streptomycin, Tzd – Terizidone, T – Thioacetoazone, Tzn - Thioridazine, Arginine (Arg)

SECTION IV: ADHERENCE

(22) Before the child starts with anti-tubercular treatment, I take the following steps to ensure adherence (please specify, as elaborately as possible):

(23) Some of the challenges patients face that hinder adherence and completion of treatment could include: (Tick as many as apply)

- A. Patient’s cultural setting
- B. Patient’s living circumstances
- C. Severe drug reactions
- D. Asymptomatic nature of some patient’s condition
- E. Lack of effective social support for the patient and family
- F. Complex treatment regimen
- G. Severe adverse effects of the drugs
- H. Forgetfulness or lack of motivation of the mother
- I. Other issues such as drug abuse, depression etc.
- J. I think steps need to be taken to ensure adherence even in the above setting or possibilities
- K. They cannot afford to complete treatment due to financial restrictions
- L. Please specify others, if any:

(24) What do you do/can be done to improve adherence in patients?

SECTION V: FOLLOW UP

(25) After the start of treatment, which investigations do you advise for the follow up? How often do you advise them?

- A. I do not advise any follow up investigation
- B. I advise the following:

Name of investigation	Frequency (every week/month etc.)

(26) At the end of treatment, which investigation do you advise?

- A. I do not advise any investigation at the end of treatment
- B. I advise the following:

	Name of investigation
1.	
2.	
3.	
4.	
5.	

(27)When do you decide to stop treatment?

(28)When do you suspect a patient is failing treatment? What is your next step of action?

- I suspect a patient is failing treatment in the _____ month after treatment has commenced.
- I do the following next:
 - A. Change the regimen
 - B. Send for culture investigations
 - C. Test for HIV if not done before
 - D. Refer to TB expert at a private or government health set up
 - E. Others (please specify): _____

SECTION VI: DRUG RESISTANCE

(29)When do you suspect MDRTB among your patients?

- A. At persistence of sputum smear positive, at _____ month of treatment with ATT.
- B. At persistence of symptoms despite of being compliant, at _____ month of treatment with ATT.
- C. At persistence of X-ray changes in asymptomatic patients, at _____ month of treatment with ATT
- D. At beginning of the treatment, when _____

(30)What is your next step of action?

- A. Investigate further at; please specify name of lab(s) where the testing is done:

Name of investigation	Name of laboratory

- B. Refer the patient(please specify where you refer): _____

(31)How do you diagnose MDRTB?

- (A) Based on clinical findings alonego to Qn. (34)
- (B) Based on Bacteriological results alonego to Qn. (32)
- (C) Based on radiological findings alonego to Qn. (34)
- (D) Based on Clinical and radiological findingsgo to Qn. (34)
- (E) Based on Clinical and Bacteriological findings go to Qn. (32)
- (F) Specify others, if any: _____

(32)If you request bacteriological investigations, which ones do you ask for? (Please tick as many as applicable, and mention where the tests are done):

- A. Solid medium at _____
- B. Liquid medium at _____
- C. GeneXpert at _____

(33) For which drug(s) do you commonly request sensitivity tests? (Tick as many as apply)

Name of drug	✓/✗	Name of drug	✓/✗	Name of drug	✓/✗
Streptomycin		Levofloxacin		Ethionamide	
Isoniazid		Kanamycin			
Rifampicin		Amikacin			
Pyrazinamide		Capreomycin			
Ethambutol		Paraamino salicylic acid			
Ofloxacin		Cycloserine			

(34) If I have a patient who is diagnosed as having MDRTB, I :

- A. Continue treatment with initial set of drugs go to Qn. (38)
- B. Treat with another set of drugs go to Qn. (35)
- C. Refer the patient to another setting (specify where)go to Qn. (38)
- D. Others (please specify)go to Qn. (35)

(35) What change in regimen do you prescribe for MDRTB patients?

Phase (intensive, IP/ Continuation, CP)	Name of drugs (use symbol)	Dosage (mg/kg)

Codes for some drugs: Cm- Capreomycin, Cf- Ciprofloxacin, Clr – Clarithromycin, Cs- Cycloserine, E – Ethambutol, Eto- Ethionamide, H- Isoniazide (INH), Lzd – Linezolid, Lf- Levofloxacin, Mfx – Moxifloxacin, Of- Ofloxacin, Z – Pyrazinamide, P- Para amino salicylic acid (PAS), Pto – Prothionamide, R-Rifampicin, Rf – Rifabutin, S- Streptomycin, Tzd – Terizidone, T – Thioacetozone, Tzn - Thioridazine, Arginine (Arg)

(36) After the start of MDRTB treatment, which investigations do you advise for the follow up? How often do you advise them?

- A. I do not advise any follow up investigation
- B. I advise the following:

Name of investigation	Frequency (every week/month etc.)

(37)When do you decide the patient is "Cured?"
I consider the patient "Cured" at _____ months, when _____

SECTION VII: RECORD KEEPING AND NOTIFICATION

(38)Is Tuberculosis a notifiable disease?

- A. Yes
- B. No
- C. I Don't know

(39)In case a new tuberculosis patient is detected, I notify the same to the nearest local authorities (Nodal Public Health Authority):

- A. Yes go to Qn. (40)
- B. Sometimesgo to Qn. (40)
- C. No, I don't think it makes a differencego to Qn. (42)
- D. No, I didn't know TB has been made a notifiable diseasego to Qn. (42)

(40)Are you aware that there is a web-based notification (online) for Tuberculosis?

- A. Yes, I am
- B. No, I am not aware

(41)How many cases (number and percentage of all TB cases) have you notified to the Nodal Public Health Authority in the past one year?

.....go to Qn. (43)

(42)If your answer to question (39) is C or D, why do you not notify TB?

SECTION VIII: OTHERS

(43)What are some of the challenges you face as a paediatrician in treating Tuberculosis?

- With the patient: _____
 - With the regimens: _____
 - With paediatric formulations: _____
 - With the investigations: _____
 - Others (please mention elaborately): _____
- _____

(44) Have you been trained with Revised National Tuberculosis Control Program (RNTCP) on the management of Tuberculosis?

- A. Yes, I have
- B. No, I have not

(45)In case of any doubt, which guidelines do you refer?

- A. I do not refer to any guidelines
- B. I refer to the following guideline(s)

(46) How do you update yourself on latest information on treatment of TB?

(47) What according to you, could help in improving information access about TB for paediatricians like yourself?

END OF QUESTIONNAIRE

ACKNOWLEDGEMENT TO THE DOCTOR:

I would like to thank you, _____ for your immense cooperation in sharing valuable information regarding the management of TB in children.

RESPONDENT AGREES TO BE INTERVIEWED ...1 Date _____ (dd/mm/yy)
RESPONDENT DOES NOT AGREE TO BE INTERVIEWED ...2
RESPONDENT DOES NOT TREAT TB ...3