Achieving Treatment Completion for Drug-Susceptible TB

LEARNER PACKET

TABLE OF CONTENTS

Click title of document to view

AGENDA

All times are listed in Pacific Standard Time

12:00-12:10 PM	**Welcome and Introductions** Presenter: Lisa Ferguson, RN, BSN, MSc, TB Nurse Consultant, Washington State Department of Health Moderator: Ann Raftery, RN, PHN, MS, Associate Medical Director, Curry TB Center
12:10-1:30 PM	**Achieving Treatment Completion for Drug-Susceptible TB Lecture**
1:30-1:40 PM	Break
1:40-2:15 PM	**Breakout Group Case Discussion**
2:15-2:30 PM	**Activity Debrief and Q&A, Wrap Up and Closing**

LEARNING OBJECTIVES

By the end of this training, participants will be able to:

- state the criteria used to determine the duration of treatment for drug-susceptible TB (DS-TB) disease
- assess for and anticipate potential barriers to treatment
- be able to identify factors to consider towards determining treatment completion
- incorporate strategies to address adherence barriers and to minimize interruptions in TB treatment

TB NURSE CASE MANAGEMENT CORE COMPETENCIES

TB Nurse Case Management Core Competencies:
This module supports the TB case manager's development of the following core competencies:

DOMAIN 1: Assessment & analytical skills - *Essential knowledge & clinical skills:*

- Understand documentation requirements for DOT and SAT
- Use established criteria to calculate for treatment completion
- Conduct periodic assessment that includes:
    - Interpretation of diagnostic tests
    - Progress toward treatment completion criteria
    - Barriers to treatment
- Develop and implement strategies that improve adherence

DOMAIN 3: Education and communication

- Ensure equitable goal setting
- Provide emotional support
- Provide patient education

GROUP CASE DISCUSSION – BREAKOUT ACTIVITY GUIDE

31 y/o male emigrated from Mexico to the US a few years ago to work various masonry jobs. He was referred to your program from the hospital after they collected sputum that was AFB positive (3+) and positive for Mycobacterium tuberculosis by molecular testing on expectorated sputum. The patient first initiated care at a local walk-in clinic the week before and was referred to the hospital due to shortness of breath abnormal chest x-ray with right upper lobe cavities and extensive upper lobe infiltrates. His TST was positive 2 year ago while he was detained in a facility. He has a history of intermittent cough for one year. He has lost 30 pounds over 6 months, is weak and has had intermittent fevers. An HIV test done 3 weeks ago was negative.

He does not have health insurance. He tells you the walk-in clinic was a waste of time, and he did not feel welcome there. He feels horrible and wants help from the health department. He also tells you he cannot be forced to do DOT if he does what the health department says. He wants to do it on his own.

When you ask how much alcohol he drinks in a day and week he assures you he will not drink because he wants to get better. He is reluctant to sign any agreements or consents and says he will stay away from people because his family lives in Mexico but will not sign an isolation agreement.

When you begin to talk about in-person DOT appointments, he shares that he has received a large hospital bill and will need to continue to work very early in the morning to late evening.

Working as a group, provide answers to the following statements and questions below:

1. Start big picture - identify 3 social and environmental areas of this person's situation that you anticipate engaging in during treatment of TB.

2. With these 3 social and environmental areas, use the two tools provided (Assess Resources & Adherence checklist), to identify questions that you would use to increase your understanding of this patient's experience.

3. List 4 areas of concern for adherence to treatment

4. For each concern describe 2 potential interventions to improve adherence. Each person in the group should provide an answer that is realistic in their state/region. (Hint: think enablers)

PATIENT QUESTIONNAIRE TO ASSESS RESOURCES

Name: _____

Phone: _____

1. Are you worried about your appointment today? Yes: ____ No: ____

2. How do you feel that you have been treated today?

Excellent Very Good Neutral Fair Poor

3. How are you feeling about your diagnosis of tuberculosis?

Excellent Very Good Neutral Fair Poor

4. Has tuberculosis disease been explained to you? Yes: ____ No: ____

   4a. What questions do you have?

Barriers:

5. Do you have reliable transportation for your next appointment? Yes: __type:__ No: __
6. Do you know someone that can help you with transportation? Yes: ____ No: ____
7. Are you worried about gas costs when attending appointments? Yes: ____ No: ____
8. Do you have somewhere reliable to stay each night? Yes: ____ No: ____
9. Do you feel safe where you sleep at night? Yes: ____ No: ____

10. In the last month, have you gone to bed hungry? Yes: ____ No: ____

11. Do you worry about your own or your family's nutrition? Yes: ____ No: ____

12. Are you the main or sole financial provider for someone? Yes: ____ No: ____

13. Circle how often do you talk with someone when you have problems?

    daily/ once a week/ once a month/ never

14. How long have you lived in this area? _____

15. List 2-3 sources of stress in your life today.

    1. _____

    2. _____

    3. _____

Please complete the PHQ-9 form next. Thank you for sharing this information with our team so that we can best meet your needs.

Washington State Department of HEALTH

DOH XXX-XXX Month Year

TABLE: DRUG REGIMENS FOR MICROBIOLOGICALLY-CONFIRMED PULMONARY TUBERCULOSIS CAUSED BY DRUG-SUSCEPTIBLE ORGANISMS

Table: Drug Regimens for Microbiologically-Confirmed Pulmonary Tuberculosis Caused by Drug-Susceptible Organisms

Regimen	INTENSIVE PHASE		CONTINUATION PHASE		Range of total doses	Comments[3, 4]	Regimen effectiveness
	Drugs[1]	Interval and Dose[2] (Minimum Duration)	Drug	Interval and Dose[2,3] (Minimum Duration)			
1	INH RIF PZA EMB	7 days/week for 56 doses (8 weeks) ***OR*** 5 days/week for 40 doses (8 weeks)	INH RIF	7 days/week for 126 doses (18 weeks), ***OR*** 5 days/week for 90 doses (18 weeks)	182 to 130	This is the preferred regimen for patients with newly diagnosed pulmonary tuberculosis.	Greater
2	INH RIF PZA EMB	7 days/week for 56 doses (8 weeks) ***OR*** 5 days/week for 40 doses (8 weeks)	INH RIF	Three times weekly for 54 doses (18 weeks)	110 to 94	Preferred alternative regimen in situations in which more frequent DOT during continuation phase is difficult to achieve.	
3	INH RIF PZA EMB	3 x/week for 24 doses (8 weeks)	INH RIF	Three times weekly for 54 doses (18 weeks)	78	Use regimen with caution in patients with HIV and/or cavitary disease. Missed doses can lead to treatment failure, relapse, and acquired drug resistance.	
4	INH RIF PZA EMB	7 days/week for 14 doses ***THEN*** 2 x/week for 12 doses[5]	INH RIF	Twice weekly for 36 doses (18 weeks)	62	Do not use 2x/weekly regimens in HIV-infected patients or patients with smear-positive and/or cavitary disease. If doses are missed then therapy is equivalent to once weekly, which is inferior.	Lesser

INH=isoniazid; RIF=rifampin; PZA=pyrazinamide; EMB=ethambutol; DOT=directly observed therapy; HIV=human immunodeficiency virus

[1] Other combinations may be appropriate in certain circumstances; additional details are provided in source document Section: "Recommended Treatment Regimens"

[2] When DOT is used, drugs may be given 5 d/week and the necessary number of doses adjusted accordingly. Although there are no studies that compare 5 with 7 daily doses, extensive experience indicates this would be an effective practice. DOT should be used when drugs are administered < 7 days per week.

[3] Based on expert opinion, patients with cavitation on initial chest radiograph and positive cultures at completion of 2 months of therapy should receive a 7-month (31 week) continuation phase.

[4] Pyridoxine (vitamin B6), 25-50 mg/day, is given with INH to all persons at risk of neuropathy (e.g., pregnant women; breastfeeding infants; persons with HIV; patients with diabetes, alcoholism, malnutrition, or chronic renal failure; or patients with advanced age). For patients with peripheral neuropathy, experts recommend increasing pyridoxine dose to 100 mg/day.

[5] Alternatively, some U.S. TB control programs have administered intensive phase regimens 5 days per week for 15 doses (3 weeks) then twice weekly for 12 doses.

Source: Adapted from Table 2: 2016 ATS/CDC/IDSA Clinical Practice Guidelines for Drug-Susceptible TB

RESOURCES ON TUBERCULOSIS

Centers for Disease Control and Prevention (CDC)
Division of Tuberculosis Elimination (DTBE)

Guidelines: https://www.cdc.gov/tb/publications/guidelines/default.htm

Online Courses:

Self-Study Modules on Tuberculosis:
https://www.cdc.gov/tb/education/ssmodules/default.htm

Core Curriculum on Tuberculosis: What the Clinician Should Know:
https://www.cdc.gov/tb/education/corecurr/core-curr-tb.htm

Curry International Tuberculosis Center (CITC)

Medical Consultation Warmline: https://www.currytbcenter.ucsf.edu/consultation

877-390-6682 (toll-free)

Warmline inquiries can also be sent to the CITC email address: currytbcenter@ucsf.edu

8:00 AM to 4:30 PM (Pacific Time), Monday through Friday (excluding holidays).
Voicemail is available to record incoming messages 24 hours a day, 7 days a week.

Online Products: https://www.currytbcenter.ucsf.edu/products
(selected highlights only—check the web page for the full list)

- *Nursing Guide for Managing Side Effects to Drug-resistant TB Treatment:* https://www.currytbcenter.ucsf.edu/products/view/nursing-guide-managing-side-effects-drug-resistant-tb-treatment
- *Drug-Resistant Tuberculosis: A Survival Guide for Clinicians, 3rd edition/2022 Updates:* https://www.currytbcenter.ucsf.edu/products/view/drug-resistant-tuberculosis-survival-guide-clinicians-3rd-edition
- *Tuberculosis Infection Control: A Practical Manual for Preventing TB:* https://www.currytbcenter.ucsf.edu/products/view/tuberculosis-infection-control-practical-manual-preventing-tb

Online Courses & Presentations: https://www.currytbcenter.ucsf.edu/trainings
(selected highlights only—check the web page for the full list)

- *Practical Solutions for TB Infection Control: Infectiousness and Isolation*
- *Tuberculosis Radiology Resource Page*

Achieving Treatment Completion for Drug-Susceptible TB
Supplemental Material

Archived Webinars: https://www.currytbcenter.ucsf.edu/trainings/webinar-archive

Classroom Trainings: https://www.currytbcenter.ucsf.edu/trainings

National Tuberculosis Controllers Association (NTCA)

Tuberculosis Nurse Case Management: Core Competencies
http://www.tbcontrollers.org/resources/core-competencies/tb-nurse-case-manager/

Interjurisdictional Transfers (Forms and resources):
http://www.tbcontrollers.org/resources/interjurisdictional-transfers/#.XZUwlOhKhPY

Interjurisdictional Transfers (Contacts):
http://www.tbcontrollers.org/community/statecityterritory/#.XZUxHuhKhPZ

California Tuberculosis Controllers Association (CTCA)

California Department of Public Health/CTCA Joint Guidelines:
https://ctca.org/guidelines/cdph-ctca-joint-guidelines/

CTCA Directory: https://ctca.org/wp-content/uploads/CTCA-Directory.pdf

CTCA Peer Support: https://ctca.org/peersupport/

WeAreTB: https://www.wearetb.com/

Peer Support Navigator, Jackie Cuen (postcard), asks Dr. Catanzaro about TB:
https://ctca.org/peersupport/interview-with-dr-cantanzaro-2021/

Heartland National Tuberculosis Center (HNTC) – https://www.heartlandntbc.org/

Southeastern National Tuberculosis Center (SNTC) – https://sntc.medicine.ufl.edu/home/index#/

Mayo Clinic Center for Tuberculosis (MCCT) – https://centerfortuberculosis.mayo.edu/

TB Free California
The TB Free California initiative is a partnership among the California Department of Public Health (CDPH), community clinics and health departments throughout California to eliminate tuberculosis (TB) – https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/TB-Free-California.aspx