



SESSION 2: ESSENTIAL ELEMENTS OF DOT – PART 1

INTRODUCTION

In this 3-hour session, participants will discuss the many barriers that can interfere with a patient's successful completion of therapy and explore ways to address them. The trainer will review methods for building rapport and communicating effectively with patients, and participants will practice the skill of asking open-ended questions. The topic of ensuring that the patient actually swallows the dose, one of the most important tasks involved in DOT, will also be covered. The session will conclude with an overview of common adverse reactions to TB medications and their signs and symptoms.

LEARNING OBJECTIVES

Upon completion of this training session, participants will be able to:

1. Explain why patient adherence is important to successful TB control outcomes
2. Identify at least five reasons why a patient might be nonadherent
3. List five techniques to build trust and communicate effectively with TB patients
4. List two ways to ensure that a dose is actually swallowed by a patient
5. State three commonly observed side effects to anti-TB medications and their signs and symptoms

Material in this session is adapted from:

- *Core Curriculum on Tuberculosis, 4th ed.* Atlanta: Centers for Disease Control and Prevention; 2000.
- *Improving Patient Adherence to Tuberculosis Treatment.* Atlanta: Centers for Disease Control and Prevention; 1994.
- *Self-Study Modules on Tuberculosis: Module 4, Treatment of Tuberculosis Infection and Disease.* Atlanta: Centers for Disease Control and Prevention; 1995.
- *Self-Study Modules on Tuberculosis: Module 9, Patient Adherence to Tuberculosis Treatment.* Atlanta: Centers for Disease Control and Prevention; 1999.
- *TB Frontline: Satellite Primer Continued, Modules 6 – 9, "Patient Adherence,"* broadcast on February 10, 2000.
- *Using Incentives and Enablers in the Tuberculosis Control Program.* Columbia: American Lung Association of South Carolina and South Carolina Department of Health and Environmental Control, Division of Tuberculosis Control; 1989.

I. RISKS FOR NONADHERENCE

A. Why is patient adherence critical to successful TB control outcomes?

When patients adhere to their complete course of TB treatment:

1. The risk for developing drug-resistant TB is decreased
2. The risk of TB spreading to others is decreased
3. Prolonged illness, disability, and possible death from TB are avoided

B. Who is at risk for nonadherence?

1. Can we reliably predict who will be nonadherent to their treatment?
No! Anyone can be nonadherent, regardless of social class, educational background, age group, gender, or ethnicity
2. Which persons are at especially high risk for nonadherence?
 - a. Homeless or people who don't have permanent housing
 - b. Persons who use alcohol and/or other substances
 - c. Persons who are unable to take pills on their own because of mental, emotional, or physical disabilities
 - d. Children and teenagers
 - e. Persons who previously did not adhere to their TB treatment

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Risks for Nonadherence

C. Why would a patient not adhere to his/her treatment?
(List challenges)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

D. What are ways to address each challenge?

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

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Adherence Case Study (see video or handout from your trainer)

II. Building Rapport and Communication Skills

A. Why is building rapport with a TB patient so important?

If a patient trusts and feels comfortable with a health care worker, he/she is more likely to participate in his/her own care, follow instructions, and adhere to his/her new TB treatment. Rapport between the patient and the health care worker is not built in one visit, but must be developed and nurtured over time. However, first impressions are important; the quality of the interaction at the first meeting between patient and health worker can set the tone for the relationship to follow.

B. How can DOT staff build rapport and trust?

1. "Start where the patient is." Listen and try to understand the patient's knowledge, beliefs, and feelings about TB disease and treatment. Recognize and address the patient's fears
2. Explain to the patient that you will do everything in your power to protect his/her confidentiality. Respect the patient's right to make decisions about his/her life and care
3. Communicate clearly. Freely provide complete and accurate information. If you don't know the answer to a patient's question, admit it, then investigate the answer and provide a response to the patient as soon as possible
4. Avoid criticizing the patient's adherence behavior; suggest behavior changes respectfully. Involve the patient in identifying possible solutions to adherence problems
5. Be on time and be consistent in what you do and say with a patient
6. Adopt and reflect a nonjudgmental attitude about behaviors that the patient may participate in that you may not agree with (e.g., drug use, homosexuality, and preferring to sleep on the street rather than in a shelter)
7. _____
8. _____

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Guest Speaker: Building Patient Rapport

Notes:

C. Skills that contribute to good communication

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____

D. What is an open-ended question?

1. A question that cannot be answered with a simple "yes" or "no"
2. Questions that begin with words and phrases such as:
Who? What? When? Where? Why? How?
Tell me about... Explain to me...

E. Why are open-ended questions useful?

Open-ended questions are useful because they are more engaging and can provide one with more information than questions that ask for "yes" or "no" answers; they help the health care worker get a clearer and fuller understanding of the patient's situation and needs.

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Open-Ended Questions

What are some examples of open-ended questions that you might ask a patient to assess his/her knowledge or beliefs about TB?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

III. OBSERVING AND DOCUMENTING THE DOSE

A. How can I make sure that a patient is actually swallowing the dose?

1. What are some of the ways you've seen patients avoid swallowing their doses?
2. Why is it important for the patient to take all the medications at once, while the DOT worker is there?
3. What are some of the ways you can prevent patients from doing these types of things?

B. How do I document the dose? (Note: Refer to sample TB DOT Log Form, page 2-9)

IV. ADVERSE REACTIONS TO TB MEDICATIONS

A. What are the four main TB medications?

1. Isoniazid (INH)
2. Rifampin (RIF)
3. Ethambutol (EMB)
4. Pyrazinamide (PZA)

B. What are the most common adverse reactions?

What are the signs and symptoms of these adverse reactions?

C. How should adverse reactions be reported?

Place your clinic identifying information here

Daily DOT Log

Date: _____

Patient's name Address (or regular hangout)	Medications & Schedule	Delivered			Time	HW Initial	Side Effects/ Other Comments
		Observed	Not observed	Not available			
1							
2							
3							
4							

COMMON ADVERSE REACTIONS TO TB DRUGS

Caused by	Adverse Reaction	Signs and Symptoms
Any drug	Allergic reactions	Skin rash
Ethambutol	Eye damage	Blurred or changed vision Changed color vision
Isoniazid Pyrazinamide Rifampin	Hepatitis	Abdominal pain Abnormal liver function test results Dark urine Fatigue Fever for 3 or more days Flu-like symptoms Lack of appetite Nausea Vomiting Yellowish skin or eyes
Isoniazid	Nervous system damage	Dizziness Tingling or numbness around the mouth
	Peripheral neuropathy	Tingling sensation in hands and feet
Pyrazinamide	Stomach upset	Stomach upset, vomiting, lack of appetite
	Increased uric acid	Abnormal uric acid level Joint aches Gout (rare)
Rifampin	Bleeding problems	Easy bruising Slow blood clotting
	Discoloration of body fluids	Orange urine, sweat, or tears Permanently stained soft contact lenses
	Drug interactions	Interferes with certain medications, such as birth control pills, birth control implants, and methadone treatment
	Sensitivity to the sun	Frequent sunburn
Streptomycin	Ear damage	Balance problems Hearing loss Ringing in the ears
	Kidney damage	Abnormal kidney function test results

[Source: *Self-Study Modules on Tuberculosis: Module 4, Treatment of Tuberculosis Infection and Disease*. Atlanta, GA: Centers for Disease Control and Prevention; 1995, p. 32]

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Finding Out if a Patient is Having Adverse Reactions

Notes:

REVIEW QUESTIONS

1) What are two negative consequences that can result if a TB patient does not adhere to the treatment regimen?

a. _____

b. _____

2) Give five reasons that a patient might be nonadherent. Give a possible way to deal with each reason.

Reason

Way to deal with barrier

a. _____

a. _____

b. _____

b. _____

c. _____

c. _____

d. _____

d. _____

e. _____

e. _____

3) Name five techniques to build trust and communicate effectively with TB patients.

a. _____

b. _____

c. _____

d. _____

e. _____

4) What are two ways you can be sure that a dose is actually swallowed by a patient?

a. _____

b. _____

5) What are three commonly observed adverse reactions to anti-TB medications?

a. _____

b. _____

c. _____

ADDITIONAL RESOURCES

- *Core Curriculum on Tuberculosis, 4th ed.* Atlanta: Centers for Disease Control and Prevention; 2000.
- *Facilitating TB Outreach: Community Workers and Hard-To-Reach TB Populations.* Video available from the Francis J. Curry National Tuberculosis Center.
<http://www.nationaltbcenter.edu>
- *Improving Patient Adherence to Tuberculosis Treatment.* Atlanta: Centers for Disease Control and Prevention; 1994.
- *Improving Tuberculosis Treatment and Control: An Agenda for Behavioral, Social and Health Services Research.* Proceedings of Tuberculosis and Behavior: National Workshop on Research for the 21st Century: 1994, Aug 28 – 30; Bethesda, MD. Atlanta: Centers for Disease Control and Prevention; 1995.
- *Self-Study Modules on Tuberculosis: 1 – 5.* Atlanta: Centers for Disease Control and Prevention; 1995.
- *Self-Study Modules on Tuberculosis: 6 – 9.* Atlanta: Centers for Disease Control and Prevention; 1999.
- *Social Support Services for Tuberculosis Clients.* New York: Charles P. Felton National Tuberculosis Center; 1999.
- Sumartojo E. Adherence to the tuberculosis treatment plan. In: Cohen FL, Durham JD, eds. *Tuberculosis: A Sourcebook for Nursing Practice.* New York: Springer Publishing Co.; 1995, chap 7.
- <http://www.harlemtbcenter.org>
Charles P. Felton National Tuberculosis Center at Harlem Hospital
- <http://www.cdc.gov/nchstp/tb>
Division of TB Elimination, Centers for Disease Control and Prevention
- <http://www.nationaltbcenter.edu>
Francis J. Curry National Tuberculosis Center
- <http://www.umdnj.edu/ntbcweb>
New Jersey Medical School National TB Center

