

Patient Education

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Introduction

Purpose

Use this section to

- Determine what information to cover in education sessions;
- Educate patients about tuberculosis (TB);
- Educate patients about latent TB infection (LTBI);

An important part of helping patients take their medicine is to educate them about TB. This means talking to them about what causes TB, the way TB is spread, how TB is diagnosed, and their specific treatment plan.¹ Patients who understand these concepts are more likely to adhere to treatment.

Patients with LTBI need to understand that they are infected with TB, that they may have specific risks for progressing to TB disease, and they can take precautions to protect themselves, their family, and their friends. Patients with TB disease need to understand the seriousness of the disease and why it is important to adhere to treatment. In order to prevent relapse and drug resistance, clinicians must prescribe an adequate regimen and make sure that patients adhere to treatment.² To ensure completion of treatment, the public health department should thoroughly educate the patient, monitor the patient's adherence, and use incentives and enablers.^{3,4,5}

General Guidelines

TABLE 1: GUIDELINES FOR THE EDUCATIONAL PROCESS

When Educating Tuberculosis (TB) Patients	
Do	Don't
<ul style="list-style-type: none">▪ Find out what patients know and believe about TB. Reinforce and provide correct TB information, and disabuse any misconceptions.▪ Use good skills to interview and influence patients, and to problem solve.▪ Go through the educational material with patients. Consider using a translator if the patient's first language is not English and use language appropriate to their level of understanding.	<ul style="list-style-type: none">▪ Flood patients with information about TB and its effects without allowing them to participate in the discussion. .▪ Hand out pamphlets and brochures to patients without going through materials with them.

Language and Comprehension Barriers

In the initial assessment, determine and address any potential language and comprehension barriers.

1. Assess the patient's ability to speak and understand instructions, including potential barriers such as not speaking English as primary language, deafness, speech deficit, or learning disability.
2. Assess literacy in the patient's primary language.
3. Provide all instruction and communications in the appropriate language.
4. Use interpreters, visuals, or other education methods to promote understanding.
5. Provide educational materials appropriate to the patient's language and reading level.
6. Make referrals to an appropriate service and notify it of any language and comprehension concerns.



For more information on cultural sensitivity, refer to the Participant's Workbook for Session 4: "Working with Culturally Diverse Populations," in the Francis J. Curry National Tuberculosis Center's DOT Essentials: The DOT Trainer's Curriculum, at this hyperlink:

http://www.nationaltbcenter.ucsf.edu/products/product_details.cfm?productID=EDP-07.

For assistance with language issues, see the Language Services Resource Guide for Health Care Providers (The National Health Law Program and The National Council on Interpreting Health Care) at this hyperlink:

<http://www.healthlaw.org/images/pubs/ResourceGuideFinal.pdf>.

Education Topics

During the initial assessment, directly observed therapy (DOT) appointments, and monthly monitoring, educate the patient as needed on the topics below.



For more information on case management activities, see the Case Management section.

Medical Diagnosis

In the initial interviews with the patient, provide information about TB and the patient's treatment plan. During directly observed therapy appointments and monthly monitoring, confirm and reinforce the patient's understanding of these topics.

1. Discuss the difference between TB Disease vs. TB Infection
2. Explain the signs and symptoms of TB, how TB is transmitted, prevention activities, and treatment.
3. Explain that TB is both treatable and preventable.
4. Explain the importance of completion of treatment.
5. Discuss diagnostic procedures used to make diagnosis of TB such as chest radiography, sputum microscopy, and tuberculin skin testing. Stress the importance of testing and follow-up.
6. Discuss the current medical treatment plan and rationale.
7. Explain the need for regular medical monitoring and follow-up during the disease process. Discuss how treatment will be monitored (i.e., sputum, blood tests, vision screening, weight check, etc.). Encourage the patient to be an active participant in care and treatment.
8. Discuss the roles of the patient, the health department, and the private provider. Encourage the patient to contact the case manager or primary care provider about issues and problems that arise during treatment.
9. Explain the risk of treatment relapse or failure and the need to complete treatment to prevent relapse.
10. Explain the signs and symptoms of possible relapse or failure and encourage the patient to report them immediately to the case manager

Contact Investigation

When a contact investigation is necessary, educate the index patient about the process and confidentiality.

1. Discuss the contact investigation process.
2. Reinforce the confidentiality of investigation but warn the patient of the potential for contacts to guess the patient's identity.

Isolation

If isolation is necessary, educate the patient about how to take proper precautions.

1. Explain isolation precautions and restrictions, if appropriate.
2. Explain the behavior changes needed for infection control. Discuss permitted and prohibited activities, limiting and excluding visitors, covering the mouth and nose when coughing and sneezing, and using a mask.
3. Explain the home environmental changes needed for infection control. Discuss ventilation and sunlight. Explain how to dispose of items soiled with potentially infectious material.
4. Discuss the requirements for release from isolation with the patient highlighting that clearance is contingent upon clinical condition and continued compliance with the treatment regimen.

Side Effects and Adverse Reactions

Educate all patients on antituberculosis medications about the medications' potential side effects and adverse reactions.

1. Explain the names, dosages, and rationale for the drug treatment plan as well as the importance of treatment.
2. Explain the common side effects and methods to improve symptoms.
3. Explain signs and symptoms of drug toxicity.
4. Direct the patient on what actions to take if side effects or signs and symptoms of toxicity appear.
5. Explain potential effects of alcohol and/or drug use on treatment and the increased risk for side effects and toxicity.



For more information on side effects and adverse reactions, see the “Side Effects and Adverse Reactions” topics in the Treatment of Tuberculosis Disease section or the Treatment of Latent Tuberculosis Infection section.

Adherence

Educate the patient about the importance of treatment, the patient's responsibilities during treatment, and the consequences of non-adherence.

1. Explain the names, dosages, and rationale for the drug treatment plan as well as the importance of treatment.
2. Explain the importance of treatment and follow-up for active TB.
3. Explain the importance of regular monitoring visits.
4. Discuss the treatment plan and expectations. Advise the patient on the patient's responsibilities and expected behavior regarding treatment compliance and follow-up activities. If required by the local public health district, have the patient sign the treatment plan and a directly observed therapy agreement.
5. Advise the patient on laws regarding TB disease and isolation.

Patient Education Materials

The CDC offers the following patient education materials online (as of January 2007). (For easy access to references, a hyperlink is provided for online reference below.)

- Get the Facts About TB Disease
http://www.cdc.gov/tb/publications/pamphlets/TB_disease_EN_rev.pdf
- Protect Your Friends and Family from TB: The TB Contact Investigation
http://www.cdc.gov/tb/publications/pamphlets/TB_contact_investigation.pdf
- Questions and Answers About TB 2009
<http://www.cdc.gov/tb/publications/faqs/default.htm>.
- Staying on Track with TB Medicine
http://www.cdc.gov/tb/publications/pamphlets/TB_trtmnt.pdf.
- Stop TB <http://www.cdc.gov/tb/publications/Posters/stoptb.htm>.
- TB Elimination: Now Is the Time
<http://www.cdc.gov/tb/publications/pamphlets/nowisthetime/default.htm>.
- Tuberculosis: General Information
<http://www.cdc.gov/tb/publications/factsheets/general/tb.htm>.
- What You Need to Know About TB Infection
http://www.cdc.gov/tb/publications/pamphlets/TB_infection.pdf
- What You Need to Know About the TB Skin Test
http://www.cdc.gov/tb/publications/pamphlets/TB_skin_test.pdf

For other sources of patient education materials, consult the resources at the end of this section.

Resources and References

Resources

(For easy access to references, a hyperlink is provided for online reference below.)

Patient Education Information for Healthcare Workers

- CDC. “Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection” (MMWR 2000;49[No. RR-6]) at: <http://www.cdc.gov/mmwr/PDF/rr/rr4906.pdf> and Updates at: http://www.cdc.gov/tb/publications/reportsarticles/mmwr/mmwr_updates.htm
- ATS, CDC, IDSA. “Treatment of Tuberculosis” (MMWR 2003;52[No. RR-11]) at <http://www.cdc.gov/mmwr/PDF/rr/rr5211.pdf>
- CDC. Self-Study Modules on Tuberculosis (1999) at <http://www.cdc.gov/tb/education/ssmodules/default.htm>
 - Module 9: “Patient Adherence to Tuberculosis Treatment” (pp. 9–10) at: <http://www.cdc.gov/tb/education/ssmodules/module9/ss9contents.htm>
 - Module 4: “Treatment of Tuberculosis Infection and Disease, Adherence to Treatment” (p. 4) at: <http://www.cdc.gov/tb/education/ssmodules/pdfs/Module4.pdf>
- National Tuberculosis Controllers Association-National Tuberculosis Nurse Consultant Coalition. Tuberculosis Nursing: A Comprehensive Guide to Patient Care (Atlanta, GA 1997) (currently being updated)

Patient Education Materials for Patients

- CDC. TB Education and Training Resources [online database] at: <http://www.findtbresources.org/scripts/index.cfm>
- CDC Division of Tuberculosis Elimination. Education and Training Materials at: <http://www.cdc.gov/tb/publications/default.htm>
- CDC Division of Tuberculosis Elimination. TB Education & Training Resources at: <http://www.findtbresources.org/scripts/index.cfm>
- Minnesota Department of Health. Tuberculosis: Patient Education Materials at: <http://www.health.state.mn.us/divs/idepc/diseases/tb/education.html>
- San Francisco Department of Health TB Clinic. Downloadable Brochures About TB in Six Languages at: <http://www.sfdph.org/dph/comupg/oservices/medSvs/TB/default.asp> (closer to the bottom of the page)
- University of Washington Harborview Medical Center. Patient Education Resources: All Languages at: <http://ethnomed.org/patient-education/tuberculosis/patient-education-tb>

References

- ¹ CDC. Module 4: Treatment of TB infection and disease. *Self-Study Modules on Tuberculosis* 1999:12.
- ² CDC. Module 4: Treatment of TB infection and disease. *Self-Study Modules on Tuberculosis* 1999:12.
- ³ CDC. Targeted tuberculin testing and treatment of latent tuberculosis infection. *MMWR* 2000;49 (No.RR-6):38–39.
- ⁴ National Tuberculosis Controllers Association-National Tuberculosis Nurse Consultant Coalition. *Tuberculosis Nursing: A Comprehensive Guide to Patient Care* 1997:64, 69, 74.
- ⁵ CDC. Module 9: Patient adherence to tuberculosis treatment. *Self-Study Modules on Tuberculosis* 1999:9–11.