

Patient Education

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Introduction

Purpose

Use this section to do the following:

- Determine what information to cover in education sessions.
- Educate patients about tuberculosis (TB).
- Educate patients about latent TB infection (TBI).
- Identify which forms to use to document education efforts.

An important part in helping patients to adhere to treatment plans 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 cannot be expected to adhere to treatment recommendations if they are not educated about TB and how it is treated, and patients who understand these concepts are more likely to adhere to treatment.

Patients with TBI need to understand that they are infected with TB, that they may have specific risks for progressing to TB disease, and that 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}

Policy

The local TB control unit determines the content for TB education that should be provided to patients with TB disease and TBI.



For roles and responsibilities, refer to the “Roles, Responsibilities, and Contact Information” topic in the Introduction.

General Guidelines

Table 1: GUIDELINES FOR THE EDUCATIONAL PROCESS

| When Educating Tuberculosis Patients | |
|--|--|
| Do | Don't |
| <ul style="list-style-type: none">▪ Find out what patients know and believe about tuberculosis (TB). Reinforce and provide correct TB information, and disabuse them of any misconceptions.▪ Use good skills to interview and influence patients and to problem solve.▪ Go through the educational material with patients. Use language appropriate to their level of understanding. If necessary, use an interpreter. | <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 the materials with them. |

Language and Comprehension Barriers

In the initial assessment, assess for 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 instructions and communications in the appropriate language.
4. Use interpreters, visuals, or other educational 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 *Directly Observed Therapy Training Curriculum for TB Control Programs* (Francis J. Curry National Tuberculosis Center Web site; 2003) at this hyperlink:

<http://www.nationaltbcenter.ucsf.edu/catalogue/epub/index.cfm?uniqueID=2&tableName=DOT> .



For assistance with language issues, see the *Language Services Resource Guide for Health Care Providers* (The National Health Law Program Web site; 2011) at this hyperlink:

<http://www.healthlaw.org/images/pubs/ResourceGuideFinal.pdf> . Note that this file downloads very slowly.

Education Topics

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



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 DOT appointments and monthly monitoring, confirm and reinforce the patient's understanding of these topics.

1. Discuss the difference between TB disease and 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. Have the patient sign the treatment plan and a DOT agreement.
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 (engage in treatment), the health department (case management, monitoring, contact tracing, and supervision of treatment), and the private provider (treatment and monitoring). Encourage the patient to contact the case manager for 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.



For more information, see *Effective TB Interviewing for Contact Investigation: Self Study Modules* (Department of Health and Human Services Centers for Disease Control and Prevention Division of Tuberculosis Elimination Web site; 2011) at this hyperlink:
<http://www.cdc.gov/tb/publications/guidestoolkits/Interviewing/selfstudy/default.htm>

Isolation

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

1. Explain isolation precautions and restrictions, if appropriate. Have the patient sign an isolation agreement.
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. Advise the patient 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 Tuberculosis Infection section.

Adherence

If a patient has the potential for not adhering to the treatment plan, educate the patient about the importance of treatment, the patient’s responsibilities during treatment, and the consequences of nonadherence.

1. Explain the drug names and dosages and the rationale for the drug treatment plan.
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. Have the patient sign the treatment plan and a DOT agreement.
5. Advise the patient on laws regarding TB disease and isolation.

Patient Education Materials

The Centers for Disease Control and Prevention (CDC) offers patient education materials online (as of April 2011).

http://www.cdc.gov/tb/education/patient_edmaterials.htm

CDC. *TB Education and Training Resources* [TB Education and Training Resources Web site]. Available at: http://www.cdc.gov/tb/education/TB_Edu_Train_Resources.htm .

CDC, Division of Tuberculosis Elimination. *Education and Training Materials* [Division of Tuberculosis Elimination Web site]. Available at:

http://www.cdc.gov/tb/education/patient_edmaterials.htm

New Jersey Medical School, Global TB Institute. Available at:

<http://www.umdnj.edu/ntbcweb/products/patienteduc.htm>

CDC, National Prevention Information Network. Available at:

<http://findtbresources.org/scripts/index.cfm>

Resources and References

Resources

Patient Education Information for Healthcare Workers

- CDC. “Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection” (*MMWR* 2000;49[No. RR-6]). Available at: <http://www.cdc.gov/mmwr/PDF/rr/rr4906.pdf> (and updates available at: http://www.cdc.gov/tb/publications/reportsarticles/mmwr/mmwr_updates.htm).
- ATS, CDC, IDSA. “Treatment of Tuberculosis” (*MMWR* 2003;52[No. RR-11]). Available at: <http://www.cdc.gov/mmwr/PDF/rr/rr5211.pdf> .
- CDC. *Self-Study Modules on Tuberculosis* (Division of Tuberculosis Elimination Web site; 2011). Available at: <http://www.cdc.gov/tb/education/ssmodules/default.htm>
 - Module 9: “Patient Adherence to Tuberculosis Treatment.” Available at: <http://www.cdc.gov/tb/education/ssmodules/module9/ss9contents.htm> .
 - Module 4: “Treatment of Tuberculosis Infection and Disease, Adherence to Treatment.” Available at: <http://www.cdc.gov/tb/education/ssmodules/pdfs/Module4.pdf> .
- CDC. *TB Elimination: Now Is the Time! 2007* (Division of Tuberculosis Elimination Web site; 2007). Available at: <http://www.cdc.gov/tb/publications/pamphlets/nowisthetime/default.htm> .

Patient Education Materials for Patients

- CDC. *TB Education and Training Resources* [TB Education and Training Resources Web site]. Available at: http://www.cdc.gov/tb/education/TB_Edu_Train_Resources.htm .
- CDC, Division of Tuberculosis Elimination. *Education and Training Materials* [Division of Tuberculosis Elimination Web site]. Available at: http://www.cdc.gov/tb/education/patient_edmaterials.htm
- New Jersey Medical School, Global TB Institute. Available at: <http://www.umdnj.edu/ntbcweb/products/patienteduc.htm>
- CDC, National Prevention Information Network. Available at: <http://findtbresources.org/scripts/index.cfm>

References

- ¹ CDC. Module 4: treatment of TB infection and disease. *Self-Study Modules on Tuberculosis* [Division of Tuberculosis Elimination Web site]. 1999:12. Available at: <http://www.cdc.gov/tb/education/ssmodules/pdfs/Module4.pdf>. Accessed November 1, 2006.
- ² CDC. Module 4: treatment of TB infection and disease. *Self-Study Modules on Tuberculosis* [Division of Tuberculosis Elimination Web site]. 1999:12. Available at: <http://www.cdc.gov/tb/education/ssmodules/pdfs/Module4.pdf>. Accessed November 1, 2006.
- 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*. Atlanta, GA: 1997:64, 69, 74.
- ⁵ CDC. Module 9: patient adherence to tuberculosis treatment. *Self-Study Modules on Tuberculosis* [Division of Tuberculosis Elimination Web site]. 1999:9–11. Available at: <http://www.cdc.gov/tb/education/ssmodules/module9/ss9contents.htm>. Accessed November 1, 2006.