FUNDAMENTALS OF TB CASE MANAGEMENT

OBJECTIVES

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

1. Describe several components of the tuberculosis case management model
2. Identify and prioritize the objectives of TB case management
3. Identify the components of a clinical evaluation of a patient with TB
4. Describe the core treatment regimen for TB and at least 3 strategies to promote adherence

INDEX OF MATERIALS

1. Fundamentals of TB Case Management – slide outline
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ADDITIONAL REFERENCES


Objectives

Upon completion of this session you will be able to:

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- Identify and prioritize the objectives of TB case management
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Overview of Case Management

Definition

- Primary responsibility for the coordination of patient care to ensure that the patient’s medical and psychosocial needs are met through appropriate utilization of resources
Overview of Case Management (2)

Primary goals
- Render the patient non-infectious by ensuring an adequate course of treatment
- Provide early intervention
- Prevent TB transmission and development of disease
- Identify and remove barriers to adherence
- Identify and address other urgent health needs

Overview of Case Management (3)

The assignment of an individual to be primarily responsible and accountable to ensure that the patient:
- Completes an appropriate course of therapy
- Is educated about TB and its treatment and management
- Has a documented culture conversion
- Has a contact investigation completed when indicated

Key Components of TB Case Management

Role of a case manager
- Ensure that care provided is culturally sensitive and acceptable to the patient
- Set goals, monitor outcomes, and appropriately document interventions
- Maintain contact not only with the patient but with the care provider and other individuals providing health-related services to the patient
Key Components of TB Case Management (2)

Steps in TB case management

- Receive the case report: review and decide on urgency within one working day (prioritize workload)

Key Components of Tuberculosis Case Management (3)

Steps in TB case management (continued)

- Contact the medical care provider: within one working day of receipt of report
  - Establish rapport
  - Educate the provider about the case manager’s roles/responsibilities and those of the local health department
  - Educate the provider about TB control program services and oversight responsibility

Key Components of Tuberculosis Case Management (4)

Steps in TB case management (continued)

- Make initial contact with patient by home visit (or in hospital) within one working day of report (ideal)
  - Establish rapport
  - Explain role of public health nurses/outreach staff
Key Components of Tuberculosis Case Management (5)

Steps in TB case management (continued)

- Assess the home environment to determine suitability
  - Space
  - Ventilation
  - Presence of high-risk individuals

Key Components of Tuberculosis Case Management (6)

Steps in TB case management (continued)

- Assess current status of the client
  - Physical
  - Psychological
  - Financial
  - Social
  - Cultural

Key Components of Tuberculosis Case Management (7)

Steps in TB case management (continued)

- Provide education about TB and TB management
- Assess for compliance with home isolation, if required
- Assess for barriers to adherence and need for DOT
- Initiate contact/source case investigation, if indicated
- Review medications and potential adverse reactions
- Present contract or agreement documents for treatment (legal orders as last resort)
Key Components of Tuberculosis Case Management (8)

Steps in TB case management (continued)
- Terminate case management
- Prepare the patient and nurse/community health outreach worker (CHOW)

Key Components of Tuberculosis Case Management (9)

Steps in TB case management (continued)
- Review and discuss any problems or concerns
  - Is more clinical information needed?
  - Is the patient infectious? Is isolation needed?
  - Are there any other medical/social problems that need to be addressed?
  - Is the treatment regimen appropriate?

Treatment

Maximum doses in mg/kg

<table>
<thead>
<tr>
<th>Drug</th>
<th>Daily</th>
<th>2 times/week*</th>
<th>3 times/week*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Children</td>
<td>Adults</td>
<td>Children</td>
</tr>
<tr>
<td>INH</td>
<td>10-20 (300 mg)</td>
<td>5 (500 mg)</td>
<td>20-40 (900 mg)</td>
</tr>
<tr>
<td>RIF</td>
<td>10-20 (600 mg)</td>
<td>10 (600 mg)</td>
<td>10-20 (600 mg)</td>
</tr>
<tr>
<td>PZA</td>
<td>15-30 (2g)</td>
<td>15-30 (2g)</td>
<td>50-70 (4g)</td>
</tr>
<tr>
<td>EMB</td>
<td>15-25 (1g)</td>
<td>15-25 (1g)</td>
<td>25-30 (1.5g)</td>
</tr>
<tr>
<td>SM</td>
<td>20-40 (1g)</td>
<td>15 (1g)</td>
<td>25-30 (1.5g)</td>
</tr>
</tbody>
</table>

Notes: Children ≤12 years old. Adult weight based dosages as weight changes.
* All regimens administered 2 or 3 times a week should be used with directly observed therapy.
Recognizing and Managing Adverse Events

- Important to be familiar with potential adverse events related to the drug regimen
- Consider a standardized protocol for the management of adverse events – know when to consult a physician

Strategies to Promote Adherence: Enablers

An enabler is anything that helps the patient to more readily complete therapy

<table>
<thead>
<tr>
<th>Examples of Enablers</th>
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</thead>
<tbody>
<tr>
<td>Transportation assistance</td>
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<tr>
<td>Bus pass</td>
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<tr>
<td>Cab fare</td>
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<tr>
<td>Gasoline</td>
</tr>
<tr>
<td>Obtaining and transporting specimens</td>
</tr>
<tr>
<td>Assisting the patient with paperwork for general relief to obtain food/housing</td>
</tr>
</tbody>
</table>

Strategies to Promote Adherence (2) Incentives

An incentive is used to encourage and reward adherence

<table>
<thead>
<tr>
<th>Examples of Incentives</th>
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</thead>
<tbody>
<tr>
<td>Food vouchers</td>
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<tr>
<td>End-of-treatment gift certificate for food, clothing, or “individual” gifts</td>
</tr>
<tr>
<td>Television set while hospitalized</td>
</tr>
<tr>
<td>Movie passes</td>
</tr>
<tr>
<td>Assistant to access drug/mental health treatment</td>
</tr>
</tbody>
</table>
Strategies to Promote Adherence (3)

- Staff who are knowledgeable, caring, and sensitive to cultural issues
- Medical care that is accessible and acceptable
- Utilization of legal interventions, which progress from least to more restrictive actions
- Directly observed therapy (DOT)

Directly Observed Therapy (DOT)

Definition
- The direct observation of the patient ingesting anti-TB medication by a trained health worker to ensure that the patient ingests his/her prescribed medication consistently and completes the required course of therapy

Directly Observed Therapy (DOT) (2)

Definition (continued):
- ATS/CDC recommends that every TB patient be considered for DOT
- 5 out of 7 doses are observed each week for daily regimen
DOT Strategies

- Maintain confidentiality
- Be flexible
- Assign a case manager to all patients on DOT
- Ensure that there are written procedures if non-licensed staff delivers medication
- Use DOT for patients managed in the private sector

Some local health jurisdictions use video DOT.

Patient Outcome Criteria

Patient care standards

- Make the initial visit within 1 working day of the receipt of a referral
- Assess the patient’s home to determine suitability of the home environment
- Assess and address barriers to adherence
- Educate the patient about TB and its management according to ATS/CDC guidelines

Patient Outcome Criteria (2)

Specific indicators

- Sputum conversion
- Clinical and radiological response
- Completion of therapy indices
- Resolution of symptoms
- Resolution of other health problems
**Patient Outcome Criteria (3)**

Patient care standards

- Ensure that the treatment regimen is appropriate based on ATS/CDC guidelines
- Elicit and evaluate contacts within 3-7 days
- Address the failure of sputum to convert within 3 months
- Address the patient’s psychosocial needs

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**Co-management of TB Patients**

Case management of a patient under the care of private providers

- The private physician is responsible for:
  - Reporting all suspected and confirmed TB cases to the local health department
  - For hospitalized cases, submitting discharge plans for review and approval by the responsible health department (California Gotch Law)

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**Co-management of TB Patients (2)**

The private physician’s responsibilities (continued)

- Managing other illnesses and any reported problems with medications
- Providing a clinical update at least quarterly and as requested by the TB Control Program
Co-management of TB Patients (3)

The local health department is responsible for:
- Assigning a case manager
- Conducting a risk assessment for non-adherence; providing DOT, if indicated
- Maintaining ongoing surveillance
- Ensuring that a contact investigation is completed
- Carrying out its mandated responsibility to protect the public health

Co-management of TB Patients (4)

- Case management under MediCal Managed Care Plan (MMCP)
  - Option 1: provider oversight and follow-up with the private physicians

Co-management of TB Patients (5)

- Case management under MMCP (continued)
  - Option 2: MMCP refers the patient to a local health department for management
    - Memorandum of Understanding (MOU) established to define roles and responsibilities of the local health department and MMCP
    - MMCP maintains responsibility for other illnesses
Co-management of TB Patients (6)

- Case management under MMCP option 2 (continued)
  - Address legal issues:
    - Who is medically liable as the physician of record?
    - Who is responsible for monitoring for drug toxicity?
    - How is confidentiality handled?

Case Manager’s Responsibility

- To develop strategies and services for the individual who has TB. The goal is for the patient to complete an adequate course of treatment
- To do everything possible to educate, support, influence, and encourage the patient to take the medications as prescribed through the last dose
- Enlist the support of the physician, social worker, and outreach staff to solve problems which arise