

## Assessing activities to address childhood TB

*Objectives:* at the end of the assessment reviewers should comment on –

- the place of childhood TB in the national TB policy;
- the appropriateness of the procedures used to identify TB in children;
- the quality of the case-management of children with TB;
- the appropriateness of the data collected on childhood TB;
- the actions that need to be taken to improve approaches to childhood TB.

*Background:*

Children with TB differ from adults in their response to the disease, and this difference may have important implications for the prevention, diagnosis and treatment of TB in children. Children are at an increased risk of progressing from primary TB infection to active TB, and are therefore a target group for preventive treatment. Also, they are at higher risk than adults for developing acute forms of TB, especially TB meningitis and miliary TB.

Diagnosing TB in children is more difficult than in adults. Diagnosis relies on a careful and thorough assessment of all evidence derived from an accurate history, clinical examination and relevant investigations (that is, tuberculin skin testing, chest radiography and sputum-smear examination). Bacteriological confirmation is not always feasible in young children who usually cannot produce a sputum sample; however, it should be sought whenever possible. As specified in international recommendations, the prevention, diagnosis and treatment of TB in children should be included in the national strategy to prevent and control TB.

Children with TB usually do not present to and are not managed within services specifically providing TB care ; they are usually seen in the context of services that, for example, provide care to sick children, or maternal and child-health services, or HIV-care services. Nonetheless, national TB programmes have an important part to play. National TB programmes should promote the integration of childhood TB prevention, diagnosis and treatment into the services where children with TB present.

*Location:* central unit of the national TB programme, coordination units at the intermediate health level and health facilities

*Staff to be interviewed:* manager of the national TB programme, staff at coordination units at the intermediate health level and staff at health facilities

*Assessment*

- a. Is childhood TB included in the national policy to prevent and control TB?
- b. Is childhood TB included in national guidelines for TB care and control? Have specific standard operating procedures or guidelines for childhood TB been developed and prepared?
- c. Are the standard operating procedures or guidelines aligned with WHO's recommendations on childhood TB? Are there any inconsistencies?
- d. Are the standard operating procedures or guidelines available at the health facilities visited?
- e. Are there any training materials about implementing activities to address childhood TB?
- f. Have specific staff within the central unit been assigned to coordinate activities for childhood TB?

## Framework for conducting reviews of tuberculosis programmes

- g. Is there a national working group on childhood TB? Does this group have clear terms of reference?
- h. Who are the members of the national working group? Are staff from maternal and child-health services and the national paediatric association (or any other relevant professional paediatric society) represented?
- i. Are any champions of childhood TB among the paediatricians who promote TB prevention and care, and who collaborate closely with the national TB programme?
- j. Has childhood TB been considered in the national strategic plan? Has the budget for activities to address childhood TB been clearly identified in the budget of the national strategic plan? Has any funding gap been identified for these activities?
- k. What continuing sources of funding have been identified for activities to address childhood TB?
- l. If there is any continuing funding from the Global Fund to fight AIDS, Tuberculosis and Malaria, are childhood TB activities financially supported through this funding?
- m. Are data on childhood TB available at the central unit? If yes,
  - i. How many childhood TB cases were notified during the past 5 years?
  - ii. What is their distribution by age group (0-4 years and 5-14 years) and type of TB (smear-positive TB, smear-negative TB and extrapulmonary TB)?
  - iii. What is the trend over time of the incidence per 100 000 population in the same age groups?
  - iv. What is the distribution of the different types of extrapulmonary TB (expressed as a percentage)?
- n. How is training on childhood TB organized?
- o. At which level of the health-care services is childhood TB diagnosed (primary, secondary or tertiary)?
- p. Are children with TB managed in the private medical sector? If yes, how many children are managed there?
- q. Are the standard operating procedures or guidelines on childhood TB available at the health facilities visited?
- r. What are the common clinical presentations of childhood TB at the health facilities visited?
- s. Which investigations are usually undertaken to confirm the diagnosis of TB in children (for example, sputum-smear microscopy, tuberculin skin testing, chest radiography)?
- t. Which treatment regimens are used to treat childhood TB? Are they aligned with WHO's recommendations?
- u. Are fixed-dose combinations (FDCs) available for paediatric use? Do they include the appropriate associations and doses? Is isoniazid available for paediatric use? Are any loose medicines available for paediatric use?
- v. Have cases of childhood TB been recorded in the TB treatment registers at the basic management units and the relevant health facilities? Has all the required information for each case been included in the register?
- w. What are the treatment outcomes for children who are treated for TB?
- x. Are contacts of children with TB investigated?
- y. Is isoniazid preventive therapy (IPT) administered to children:
  - for whom contact investigation did not identify anyone with active TB;
  - who are HIV-positive but do not have active TB.
- z. What proportion of children completed IPT during the past year?

## Framework for conducting reviews of tuberculosis programmes

Indicators for: <b>Assessing activities to address childhood TB</b>		
<i>Indicator</i>	<i>Calculation</i>	<i>Source of information</i>
Number of children with TB aged <ul style="list-style-type: none"> <li>• 0–4 years</li> <li>• 5–14 years</li> <li>• 0–14 years</li> </ul>	Number of children with TB belonging to each age group	TB treatment register, relevant reports
Number of children with TB who have <ul style="list-style-type: none"> <li>• smear-positive pulmonary TB</li> <li>• smear-negative pulmonary TB</li> <li>• extrapulmonary TB</li> </ul>	Number of children with <ul style="list-style-type: none"> <li>• smear-positive pulmonary TB</li> <li>• smear-negative pulmonary TB</li> <li>• extrapulmonary TB</li> </ul>	TB treatment register, relevant reports
Treatment success rate for childhood TB	Numerator: number of children with TB who were cured or who completed TB treatment within a specified period of time  Denominator: number of children with TB who were registered during the same period	TB treatment register, relevant reports
Number of children who were prescribed IPT	Number of children who were prescribed IPT	Contact investigation information system, HIV/AIDS information system, IPT register, relevant reports
Proportion of children who completed IPT	Numerator: Number of children who completed IPT  Denominator: Number of children who were prescribed IPT	Contact investigation information system, IPT register, relevant reports

IPT, isoniazid preventive therapy.