Guidance for national tuberculosis programmes on the management of tuberculosis in children

Second edition



Guidance for national tuberculosis programmes on the management of tuberculosis in children

Second edition



WHO Library Cataloguing-in-Publication Data

Guidance for national tuberculosis programmes on the management of tuberculosis in children – 2nd ed.

1. Tuberculosis – diagnosis. 2. Tuberculosis – therapy. 3. Tuberculosis – prevention and control. 4. Child. 5. Tuberculosis, Multidrug-Resistant. 6. National Health Programs. 7. Guideline. I. World Health Organization

ISBN 978 92 4 154874 8

(NLM classification: WF 200)

© World Health Organization 2014

All rights reserved. Publications of the World Health Organization are available on the WHO website (<u>www.who.int</u>) or can be purchased from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: <u>bookorders@who.int</u>).

Requests for permission to reproduce or translate WHO publications –whether for sale or for non-commercial distribution– should be addressed to WHO Press through the WHO website (www.who.int/about/licensing/copyright_form/en/index.html).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Printed by the WHO Document Production Services, Geneva, Switzerland.

Design by Jean-Claude Fattier.

WHO/HTM/TB/2014.03

CONTENTS

Prefa	се		V		
Decla	ratior	ns of Interest	vii		
Ackn	owled	dgements	ix		
Abbreviations and acronyms					
Definitions and distinctions					
Executive summary					
1.	Intr	oduction	11		
	1.1	Chapter objectives	11		
	1.2	Purpose of the guidance for TB in children			
	1.3	Target audience			
	1.4	How does management of TB in children and adolescents differ			
		from that in adults?	12		
	1.5	Ethical issues	12		
	1.6	The burden of TB in children	13		
2.	Methodology				
	2.1	Chapter objectives	15		
	2.2	Process of updating the 2006 edition	15		
	2.3	Expiry date	19		
3.	Diag	nosis of TB in children	21		
	3.1	Chapter objectives	21		
	3.2	Introduction to diagnosis of TB in children	21		
	3.3	Recent improvements in diagnostics	22		
	3.4	Recommended approach to diagnosis of TB in children	26		
4.	Treatment of TB in children				
	4.1	Chapter objectives	33		
	4.2	Principles of treatment in children	33		
	4.3	Recommended dosages	33		
	4.4	Recommended treatment regimens	35		
	4.5	Implementation considerations	38		
5.	Prev	ention of TB in children	43		
	5.1	Chapter objectives	43		
	5.2	BCG vaccination	43		

	5.3	Contact screening and management	45
	5.4	TB infection control	50
6.	Mar	agement of TB in children living with HIV	55
	6.1	Chapter objectives	55
	6.2	Introduction	55
	6.3	Approach to diagnosis	55
	6.4	Prevention of TB	56
	6.5	Treatment of TB (in children living with HIV)	59
7.	Mar	agement of drug-resistant TB in children	65
	7.1	Chapter objectives	65
	7.2	Introduction	65
	7.3	Diagnosis	65
	7.4	Prevention of TB disease in child contacts of drug-resistant TB	66
	7.5	Treatment	67
	7.6	Implementation considerations	68
8.	Imp	lementation and management by NTP; integrated care	75
8.	lmp 8.1	lementation and management by NTP; integrated care Chapter objectives	
8.			75
8.	8.1	Chapter objectives	75 75
8.	8.1 8.2	Chapter objectives Action at the global level	75 75 75
8.	8.1 8.2 8.3	Chapter objectives Action at the global level Next steps at national level	75 75 75 78
8.	8.1 8.2 8.3 8.4 8.5	Chapter objectives Action at the global level Next steps at national level Integrated care	75 75 75 78 80
	8.1 8.2 8.3 8.4 8.5 Sug	Chapter objectives Action at the global level Next steps at national level Integrated care An integrated family-oriented approach to addressing TB in children	75 75 75 78 80 87
	8.1 8.2 8.3 8.4 8.5 Sug	Chapter objectives Action at the global level Next steps at national level Integrated care An integrated family-oriented approach to addressing TB in children gestions for future research	75 75 75 78 80 87 87
9.	8.1 8.2 8.3 8.4 8.5 Sug 9.1	Chapter objectives Action at the global level Next steps at national level Integrated care An integrated family-oriented approach to addressing TB in children gestions for future research Chapter objectives	75 75 75 78 80 87 87
9. Ar	8.1 8.2 8.3 8.4 8.5 Sug 9.1 9.2	Chapter objectives Action at the global level Next steps at national level Integrated care An integrated family-oriented approach to addressing TB in children gestions for future research Chapter objectives	75 75 75 78 80 87 87 87
9. Ar	8.1 8.2 8.3 8.4 8.5 Sug 9.1 9.2 Summa	Chapter objectives Action at the global level Next steps at national level Integrated care An integrated family-oriented approach to addressing TB in children gestions for future research Chapter objectives Suggestions for future research	75 75 75 80 87 87 87
9. Ar 1.	8.1 8.2 8.3 8.4 8.5 Sug 9.1 9.2 Summa TB case	Chapter objectives Action at the global level Next steps at national level Integrated care An integrated family-oriented approach to addressing TB in children gestions for future research Chapter objectives Suggestions for future research	75 75 75 80 87 87 87 91 109

5.	Interim guidelines for treatment of TB in young children (less than 25 kg)	
	using currently available FDCs (RHZ 60/30/150) and dosages achieved	
	per weight	125

PREFACE

The first edition of Guidance for national tuberculosis programmes on the management of tuberculosis in children was published in 2006. It resulted in the revision or development of guidelines for child TB management by national TB programmes in many TB-endemic countries. Now, however, newly published evidence and new recommendations have made it necessary to update the original 2006 guidance.

Like the original, this second edition aims to inform the revision of existing national guidelines and standards for managing TB, many of which include guidance on children. It includes recommendations, based on the best available evidence, for improving the management of children with TB and of children living in families with TB. National and regional TB control programmes may wish to adapt these recommendations according to local circumstances.

Since 2006 there has been a welcome increase in the attention being given to the specific challenges of TB in children and an increased recognition of its importance as a global public health challenge. Although most children with TB may not be responsible for widespread transmission of the disease in the community, TB is an important contributor to maternal and child morbidity and mortality.

Following publication of the 2006 guidance, many countries developed national policies and strategies to address childhood TB. Practical implementation of these strategies, however, has not always been achieved. The challenge now is to address this widespread policy-practice gap by scaling up childhood TB activities in endemic countries.

This publication contains a number of important changes or additions to the first edition; these are highlighted in the Executive summary. It also has separate chapters dealing with issues that were covered only in annexes to the first edition (management of TB/ HIV in children and of drug-resistant TB in children) and introduces new topics such as the importance of integrated care.

Efforts have been made to include the management of tuberculosis in adolescents whenever relevant. This is in recognition of the fact that adolescents are a vulnerable group that is not specifically highlighted in current guidelines for the management of TB.

Publication of the first edition of this guidance predated the WHO process for the development of evidence-based guidelines; preparation of the second edition, however, has adhered to that process. Many current WHO recommendations, already published in guideline documents for management of TB and HIV, are referred to in this guidance; any earlier recommendation that has been altered, following review, as regards detail, strength of recommendation and/or quality of evidence is highlighted.

There is an urgent need to address the lack of epidemiological data on TB in children in high-burden countries, and for further study of how children with TB differ from adults in their immunological and pathological response, so that better tools for prevention, diagnosis and treatment can be developed and evaluated. Nevertheless, there is much that can already be done to reduce the burden of TB in children.

DECLARATIONS OF INTEREST

The Guidelines Development Group (henceforth referred to as the Panel) was established to advise WHO throughout the entire process of the development of this guidance. The experts on the Panel and the institutions where they work, contributed time to the various discussions and other activities involved in the update process. The External Review Group provided comments on the draft document.

Declaration of Interest forms were completed by all members of the Panel and the External Review Group, as well as by members of the academic centres that were involved in the reviews.

PANEL MEMBERS

Six members of the Panel declared interests as follows:

Dr Susan Abdel-Rahman reported that her employer receives research support from the United States National Institutes of Health for the development of dried blood spot assays for monitoring anti-TB drugs (2011-2013). In addition, Dr Abdel-Rahman prepared technical reports for WHO evaluating current anti-TB dosing regimens.

Dr Lisa Adams reported that colleagues in her research unit received research support from Oxford Immunotec Inc., the makers of the T-SPOT TB test. Dr Adams was involved in the study but reported receiving no remuneration or support from these research funds. Dr Adams is also involved in a TB CARE II Project, conducting an overview of systematic reviews of interventions to improve delivery of isoniazid preventive therapy (IPT) to children who are TB contacts and/or HIV-positive with the intention of sharing these findings to inform development of this guidance.

Dr Farhana Amanullah reported being employed at the Indus Hospital and having received non-monetary support (in the form of paid travel) through the Stop TB Partnership.

预览已结束,完整报告链接和

https://www.yunbaogao.cn/report/index/report?rep