सत्यमेव जयते
Ministry of Health and Family Welfare
Government of India

Collaborative Framework to Address the Burden of Tuberculosis among Children and Adolescents

Nikshay Sampark
(TB Helpline):
1800-11-6666

COLLABORATIVE FRAMEWORK TO ADDRESS THE BURDEN OF TUBERCULOSIS AMONG CHILDREN AND ADOLESCENTS

July 2021

Ministry of Health and Family Welfare
Government of India

Published by:
Ministry of Health and Family Welfare
Nirman Bhawan, Maulana Azad Road
New Delhi - 110011
www.mohfw.gov.in / www.mohfw.nic.in

Developed with Technical Support from:
Catalyzing Pediatric TB Innovations (CaP TB) – SAATHII/EGPAF/Unitaid

TABLE OF CONTENTS

राजेश भूषण, आईएएस
सचिव
RAJESH BHUSHAN, IAS
SECRETARY

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण विभाग
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
Government of India
Department of Health and Family Welfare
Ministry of Health and Family Welfare

MESSAGE

India has the largest population of young people globally, with over a third aged between 0–18 years. Investing in their physical, emotional and social well-being is vital to ensure that they realize their potential, participate and contribute in the nation's development. India, as a signatory to the UN Convention on the Rights of the Child and more recently, through the National Plan of Action for Children, has constantly reiterated its commitment to nurture its young population.

Communicable diseases pose a grave challenge for the well-being of young populations. Particularly, tuberculosis exacts a massive toll on the health and productivity of children and adolescents in our country, with cases reported amounting to 1.5 lakh in 2019, and about 1800 deaths in the under-15 age group. The disease persists on a large scale even though there have been major advancements in the form of diagnostics and treatment over the past five years. Due to limited knowledge about TB among some communities, underlying risk factors such as under-nutrition, and difficulties in accessing appropriate care promptly, thousands of children continue to contract TB, and significant numbers also suffer long-term functional impairment.

Eliminating TB therefore, is an essential step in securing the rights of children and adolescents for a disease-free future. In this context, I am pleased to present this collaborative framework that embodies our commitment to the cause. The Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Kishor Swasthya Karyakram (RKSK) will help bridge last-mile gaps in TB screening through activities at Anganwadis, schools and Adolescent Friendly Health Clinics, and connect those affected with the National Tuberculosis Elimination Program (NTEP). The goal of a TB-free India as laid out by the Hon'ble Prime Minister can certainly be achieved through a coordinated effort.

Place: New Delhi
Date: 25 May 2021

(Rajesh Bhushan)

Room No. 156, A-Wing, Nirman Bhawan, New Delhi-110 011
Tele : (O) 011-23061863, 23063221, Fax : 011-23061252, E-mail : secyhfw@nic.in

आरती आहूजा भा.प्र.से.
अपर सचिव
Arti Ahuja, IAS
Additional Secretary
Tel. : 011-23061066, 23063809
E-mail : ash-mohfw@nic.in

सत्यमेव जयते

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
निर्माण भवन, नई दिल्ली-110011
Government of India
Ministry of Health and Family Welfare
Nirman Bhavan, New Delhi - 110011

May 25, 2021

MESSAGE

Tuberculosis remains one of the key causes of childhood morbidity and mortality in India. To achieve the ambitious target of eliminating TB by 2025, five years ahead of the SDG goal, it is important to improve the treatment and prevention of TB, not just in adults but also in children.

To facilitate the process of achieving the goal of ending TB, a special focus on children is the need of the hour. National Tuberculosis Elimination Programme (NTEP) and the two major programmes working with children in the country namely, Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Kishor Swasthya Karyakram (RKSK) have forged an inter-sectoral collaboration to accelerate this drive. Collectively the two programmes will work with the NTEP and support its goals by providing comprehensive screening and counselling services through their existing programmes to ensure no child with TB is missed and is referred to the nearest healthcare centre for timely intervention. By actively reaching out to children and adolescents at Anganwadis and schools, these efforts will be especially useful in finding those who may not access facility-based health services, and are consequently most likely to suffer due to delays in TB diagnosis and treatment.

This collaborative framework pivots around children and adolescents with TB and aims to plug gaps in diagnosis and treatment. It is a welcome move by the three programs to come together and step up the efforts in reaching out to this vulnerable and often overlooked population most at risk. These measures will significantly contribute to our goal of eliminating TB by 2025.

(Arti Ahuja)

सत्यमेव जयते

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
निर्माण भवन, नई दिल्ली – 110011
Government of India
Department of Health and Family Welfare
Nirman Bhavan, New Delhi - 110011

वन्दना गुरनानी, भा.प्र.से.
Vandana Gurnani, I.A.S.
अपर सचिव एवं मिशन निदेशक (रा.स्वा.मि.)
Additional Secretary & Mission Director (NHM)

MESSAGE

A civilization's future is foretold by the health of its young. Besides the moral imperative to ensure the highest standards of health for our young population, devoting resources towards their health leads to healthy and productive citizens.

This population is heterogeneous, with risk factors and disease burdens varying considerably between childhood and adolescence. Globally, and in India, infectious diseases have remained among the leading causes of death for children under five. For adolescents, data are relatively limited, but communicable diseases and increasingly mental-health issues contribute to significant levels of death and disability.

In the context of TB, both younger children and adolescents pose unique challenges. Children under five exposed to TB – typically through household members – are at the highest risk of being infected and progressing to disease. At the same time, diagnosis is challenging given the atypical presentation and the lesser sensitivity of commonly used diagnostic methods to the low bacillary load in children with TB disease. Adolescents over 15 years are at similar risk for exposure as adults because of greater social contact. The risks of infection and progression to disease are also similar. The stigma associated with TB may profoundly impact their mental health, particularly for girls due to fears about the loss of fertility.

Furthermore, substantial numbers of India's young live with conditions that put them at higher risk for TB. The country has the largest population of children and adolescents with HIV in South Asia. In addition, undernutrition is a significant problem with several states reporting high levels of stunting, wasting and low-weight for age among children under 5, as per the National Family Health Survey – 5.

The national framework on collaboration between the National Tuberculosis Elimination Program (NTEP), the Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Kishor Swasthya Karyakram (RKSK) is a necessary step to address the issues that impact the vulnerability of children and adolescents to TB. I congratulate the Central TB Division and the Child Health Division of the Ministry for coming together to develop this important document and urge all the stakeholders especially the states / UTs to join hands for strengthening the implementation of this initiative.

(Vandana Gurnani)

स्वच्छ भारत-स्वस्थ भारत
Tele : 011-23063693, Telefax : 011-23063687 E-mail : vandana.g@ias.nic.in

राष्ट्रीय स्वास्थ्य मिशन

डॉ. पी. अशोक बाबू, भा.प्र.से.
संयुक्त सचिव
Dr. P. Ashok Babu, IAS
Joint Secretary

सत्यमेव जयते

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
निर्माण भवन, नई दिल्ली-११००११

GOVERNMENT OF INDIA
MINISTRY OF HEALTH & FAMILY WELFARE
NIRMAN BHAVAN, NEW DELHI-110011

No.Z-28015/05/2018-TB(Part 6)-(Part 3)
16th June, 2021

Message

Childhood Tuberculosis has been recently termed a "silent epidemic" by the International Union Against Tuberculosis and Lung Disease. Indeed, there is great scope to identify the burden of childhood TB globally and in India; and the TB notifications among children have still not increased beyond 6% of total TB notifications. Children with TB can get the required and timely attention by the public health system if the challenges faced in the diagnosis techniques are addressed.

The Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Kishor Swasthya Karyakram (RKSK) acquire a significant role in this scenario, having the potential to take child and adolescent health services to the unreached. The RBSK Mobile Health Teams screen over 19 crore children annually, identifying over one crore with birth defects, diseases, deficiencies or developmental delays; while the RKSK targets provision of services to almost 25 crore adolescents through their interventions viz., Adolescent Friendly Health Clinics (AFHCs), Weekly Iron Folic Supplementation (WIFS), Menstrual Hygiene Scheme (MHS) and the Peer Educator Programme.

Therefore, expanding the scope of these programmes to include TB screening, counselling and sensitization is a simple doable and cost-effective step that could be catalytic in increasing detection of children and adolescents identified with TB and reducing treatment delays. The guidance provided through this collaborative framework will help the three programmes – the NTEP, RBSK, and RKSK to work synergistically, sharing effectively human resources and information to lessen the prevalence of TB in this age-group, and advance the nation's efforts to eliminate TB.

(Dr. P Ashok Babu)

Room No. 243 (A), 'A' Wing, Nirman Bhawan, New Delhi - 110011
Tel. : 011-23061447 E-mail : jsrch-mohfw@gov.in

Dr. Sudarsan Mandal, MD
Deputy Director General
Head, Central TB Division
Project Director, NTEP

सत्यमेव जयते

Tel.: 011-23061130
E-mail: ddgtb@rntcp.org
mandals@rntcp.org

भारत सरकार
Government of India
स्वास्थ्य एव परिवार कल्याण मंत्रालय
Ministry of Health & Family Welfare
निर्माण भवन, नई दिल्ली-110108
Nirman Bhawan, New Delhi-110108

Date: 20th May,2021

A concerted effort towards Tuberculosis (TB) elimination has resulted in significant improvement in diagnosis, treatment, and notification. Since the inception of the National Strategic Plan (2017-2025), TB notifications increase on yearly basis and a total 21.5 lakh and 24 lakh TB notification were done in 2018 and 2019, respectively.

Despite of the progress of National Tuberculosis Elimination Programme (NTEP), about 2.4 lakh cases were estimated to be "missing" in 2019, indicating gaps in case identification. While TB incidence in age group of children less than 15 years are estimated to be about 10% of total new TB cases annually, notifications have remained at 6-7% of the total for several years. In the backdrop of the COVID-19 pandemic, TB notifications across all age groups show an observable decline, raising fears among experts that this could slow the efforts to eliminate the disease.

Differences in the clinical presentation of TB in children make early identification, a challenging task. Children with TB are more likely to seek care in the private sector, visiting multiple health care providers, which delays timely detection. Given that children may develop advanced and disseminated forms of TB within a short time, there is an urgent need to address these delays. Therefore, it is crucial to intensify active case finding, integrate TB screening with other child health services and streamline links with TB diagnosis and treatment services. It is equally important to raise awareness among caregivers, adolescents and the larger community about the prevalence, risk factors and importance of early identification of TB.

The Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Kishor Swasthya Karyakram (RKSK) are the two major programmes that provide comprehensive screening and preventive services. The collaboration between the NTEP, RBSK and RKSK, to address the burden of TB among the child and adolescent population comes at a critical time as the COVID pandemic is going on, and India steps up efforts to strengthen service delivery in the TB programme. This promising endeavour will surely take TB prevention and care services to greater numbers of children and help make India TB-free.

(Dr. Sudarsan Mandal)

Dr. Sanjay Kumar
Sr CMO (NFSG)/Joint Director,
RNTCP, Central TB Division

सत्यमेव जयते

Tel. : 011-23061428
E-mail : mattoos@rntcp.org
sanjayk.mattoo@gov.in

भारत सरकार
Government of India
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
Ministry of Health & Family Welfare
निर्माण भवन, नई दिल्ली-110011
Nirman Bhavan, New Delhi-110011

Date : 15.06.2021

Message

Tuberculosis remains one of the key causes of childhood morbidity and mortality in India. Age is an important dimension contributing to TB vulnerability because children under five and over ten years especially are susceptible to TB infection. To achieve the ambitious target of eliminating TB by 2025, five years ahead of the SDG goal, it is important to improve the treatment and prevention of TB not just in adults but also in children.

The need for a multi-stakeholder response to TB is increasingly being recognized as a crucial step to control the spread of TB. To prevent vulnerable groups from getting infected from TB, we need to bridge the gaps in health-care delivery and more importantly unified action between the different units of the public health system is needed. National Tuberculosis Elimination Programme (NTEP), Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Kishor Swasthya Karyakram (RKSK) have together developed National Framework on collaboration to accelerate this drive.

This is one of the major steps towards the goal of "Elimination of TB in India" by 2025, which envisages early diagnosis and treatment of TB in children and adolescents. Not only would it benefit children with active TB but also those with latent infection, who may go on to develop the disease, often after years.

I am certain the guideline will help the states and UTs, Mission Directors and programme officers in ensuring every child and adolescents suspected of TB / contact of active TB case is screened / referred to the nearest healthcare center for timely diagnosis, management of tuberculosis and preventive services.

Dr Sanjay Kumar Mattoo

LIST OF CONTRIBUTORS

Ministry of Health and Family Welfare, Government of India

- Mr Rajesh Bhushan – Secretary (H&FW)
- Ms Arti Ahuja – AS&DG (Health)
- Ms Vandana Gurnani – AS&MD (NHM)
- Dr Manohar Agnani – AS (RCH)
- Dr P Ashok Babu – JS (RCH)
- Dr Sumita Ghosh – Additional Commissioner (in-charge Child and Adolescent Health)
- Dr Sudarshan Mandal – DDG (TB)
- Dr Sanjay Kumar Mattoo – Joint Director (TB)
- Dr Zoya Ali Rizvi – Deputy Commissioner (Adolescent Health)
- Dr Raghuram Rao – Deputy Director (TB)
- Dr Ajay Khera – Ex-Commissioner (MCH)
- Dr KS Sachdeva – Ex-DDG (TB)
- Dr Arun Singh – Advisor, RBSK
- Ms Indhu – Manager, RBSK
- Mr Deepak Kumar – Consultant, Adolescent Health

Technical Experts

- Dr Varinder Singh – Director Professor, Dept. of Pediatrics, LHMC, New Delhi (Chairman)
- Dr Sushil K Kabra – Professor, Dept. of Pediatrics, AIIMS, New Delhi (Subject expert) (Co-Chair)
- Dr Sangeeta Sharma – HOD, Dept. of Pediatrics, NITRD, (Subject expert) (Co-Chair)
- Dr Kiran Rade – WHO National Professional Officer (TB Epidemiologist)
- Dr Priyanka Agarwal – WHO NTEP National Consultant, TB Comorbidities
- Dr Deepak Balasubramanium – Public Health Lead, Everwell Health Solutions
- Dr Sathish Kumar – Country Director, SAATHII
- Ms Anamika Lahiri – National Documentation and Research Manager – CaP TB, SAATHII

Technical Support and Design

- Catalyzing Pediatric TB Innovations (CaP TB) – SAATHII/EGPAF/Unitaid

ABBREVIATIONS

ASHA	Accredited Social Health Activist
AFHC	Adolescent Friendly Health Clinics
AH	Adolescent Health
AHD	Adolescent Health Day
ATT	Anti Tubercular Treatment
ANM	Auxiliary Nurse Midwife
CBNAAT	Cartridge Based Nucleic Acid Amplification Test
CHC	Community Health Centre
CHO	Community Health Officer
DMC	Designated Microscopy Centre
DOTS	Direct Observed Treatment, Short Course
DEIC	District Early Intervention Centre
DTC	District TB Cell
DR-TB	Drug Resistant Tuberculosis
DST	Drug Susceptibility Testing
DH	District Hospital
GA	Gastric Aspirate
GL	Gastric Lavage
GBV	Gender-Based Violence
HIV	Human Immunodeficiency Virus
IEC	Information, Education and Communication
IFA	Iron Folic Acid
IS	Induced Sputum
MIS	Management Information System
MO	Medical Officer
MHS	Menstrual Hygiene Scheme
MHT	Mobile Health Team
NTEP	National TB Elimination Programme
NTEG	National Technical Expert Group
NCD	Non Communicable Diseases
NAAT	Nucleic Acid Amplification Test
PE	Peer Educator
PHC	Primary Health Centre
RBSK	Rashtriya Bal Swasthya Karyakram
RKSK	Rashtriya Kishor Swasthya Karyakram
SDH	Sub-Divisional Hospital
STLS	Senior TB Lab Supervisor
STS	Senior Treatment Supervisor
SRH	Sexual and Reproductive Health
TBHV	TB Health Visitor
TPT	TB Preventive Therapy
ToT	Training of Trainers
TB	Tuberculosis
VHSNC	Village Health, Sanitation and Nutrition Committee
WIFS	Weekly Iron and Folic Acid Supplementation

PREFACE

Reducing morbidity and mortality due to pediatric TB requires multi-stakeholder collaboration and optimization of the resources available to the primary child health programmes, as envisaged by the National Strategic Plan 2017–2025. This framework will guide the operationalizing of key strategies to reach the pediatric population with services for TB prevention, identification and treatment.

The framework was developed through a consultative process by the National Tuberculosis Elimination Programme, Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Kishor Swasthya Karyakram (RKSK) and draws on the implementation experiences of programme managers across the states.

Core approaches on which it is centred include raising community awareness, promoting preventive and care-seeking behaviours, generating demand for diagnostic services, early identification, followed by treatment initiation and tracking the various stages of healthcare till the end.

This document lays out how the collaboration will be implemented on ground through sensitization of stakeholders, role demarcation and outcome monitoring. It delineates the roles and responsibilities of the TB division and RBSK/RKSK Programme Management Units at the District, State and National level, and those of the supervisory NTEP staff, RBSK team, RKSK facility-level service providers and Peer Educators. It details the activities to be undertaken by healthcare workers under each programme at outreach and facility levels and outlines the mechanisms by which national-, state- and district-level stakeholders from the three programmes will coordinate and oversee collaborative activities. Also, modalities for the training and sensitization of managers and healthcare workers, and a framework for the monitoring and evaluation of the interventions, and clear supervision and monitoring indicators are provided in this document.

This comprehensive framework is intended to be used by programme managers, and implementers from the NTEP, RBSK and RKSK, and its adoption will help increase case detection, which is crucial for accelerating the decline in TB incidence.

I. MAGNITUDE OF THE PROBLEM

13%
Pediatric TB is estimated to make up 13% of total TB infections annually in India

Adolescents can develop **EXCAVATED PULMONARY FORMS** and disseminate bacilli through cough

LOW IMMUNITY
makes children more vulnerable to TB and prone to develop severe illness rapidly

Globally, people of all age groups are affected by tuberculosis (TB). As per the Global TB Report 2020, 56% adult males, 32% adult females and 12% children worldwide, have TB.[1] In India, an estimated 3.33 lakh children in the 0–14 years' age group become ill with TB each year (28% of global childhood TB burden), with a slightly higher burden among males. Pulmonary TB is the most common form in children but extra-pulmonary TB forms a larger proportion of cases than in adults. It is also known that about 6% of the cases reported to National TB Elimination Programme (NTEP) are from children up to 14 years of age.[1]

The principles of diagnosis and treatment in children and adults are the same, yet the dissimilarities in the pathology and the host bring up challenges when dealing with pediatric TB. Adults and older children more often have the infectious form of TB which can be detected by testing of sputum, while in general, children have forms of TB which may be more easily picked up on a chest radiograph.

Children up to 14 years constitute about 30% (Census 2011) of the population in India and are expected to contribute about 13% of the caseload.[1] In absolute numbers, children up to 14 years total 37 crores, while adolescents aged 10–19 years total 25.3 crores in India.[3] In 2019, the NTEP reported 1.5 lakh TB cases of children aged 0–14 years, indicating a gap of 55% in TB notifications in this age group.

Table 1: Pediatric and Adolescent TB burden in India, 2019 (Data source – Nikshay)

Indicator	Pediatric (0–14 years)	Adolescents (10–19 years)	All TB patients
No. TB cases notified (% of total TB cases notified)	1,51,286 (6%)	3,01,301 (13%)	24,10,344 (-)
Male: Female: Transgender	50.0: 49.9: 0.1	45.4: 54.5: 0.1	62.8: 37.1: 0.1
Pulmonary TB cases (%)	60%	67%	74%
Microbiologically confirmed cases (%)	20%	43%	49%

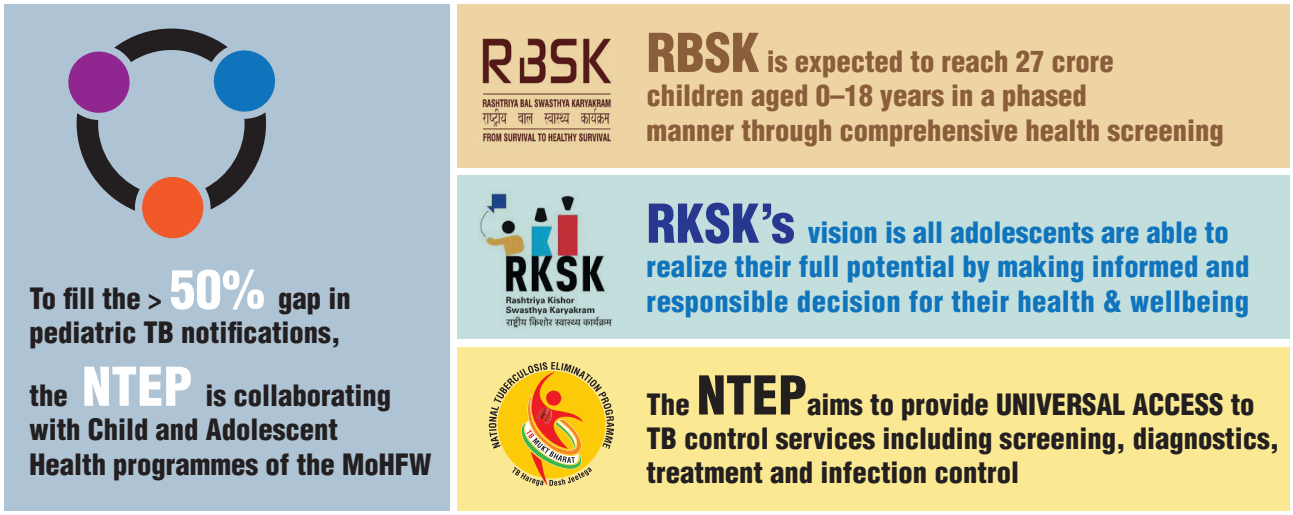
Characteristics of tuberculosis among children

Children, especially those under five years, are more vulnerable to TB because of their low immunity. Children may develop disease rapidly with atypical symptoms and may also progress to severe illness. It is difficult to diagnose TB in children, firstly because the symptoms of TB among children are similar to other childhood illnesses and secondly, because of difficulties in accessing pulmonary samples as children more often swallow sputum. The lower sensitivity of microbiological tests in children further add to this difficulty.[4] Tuberculosis affects both male and female children and also both the lungs (pulmonary TB) and other parts of the body (extra pulmonary TB). Pulmonary TB is more common among children, similar to adults. Further, drug dosage requirements in children are different and higher than adults because of their high rate of metabolism.

Characteristics of tuberculosis among adolescents

Tuberculosis in adolescents is distinct from both childhood and adult TB in terms of risk factors, incidence, disease manifestations, difficulties in diagnosis, timely response and comorbidities. They have higher bacillary load and may transmit TB, develop excavated pulmonary forms, and, moreover, are able to cough and disseminate bacilli, similar to adults.[5]

II. INTEGRATION OF THE NATIONAL PROGRAMME FOR TUBERCULOSIS WITH CHILD AND ADOLESCENT HEALTH



In order to address the gaps in Pediatric TB coverage, the NTEP collaborated with Child Health and Adolescent Health programmes of the Ministry of Health and Family Welfare (MoHFW). The two primary health programmes that serve children and adolescents across the country are Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Kishor Swasthya Karyakram (RKSK), respectively.

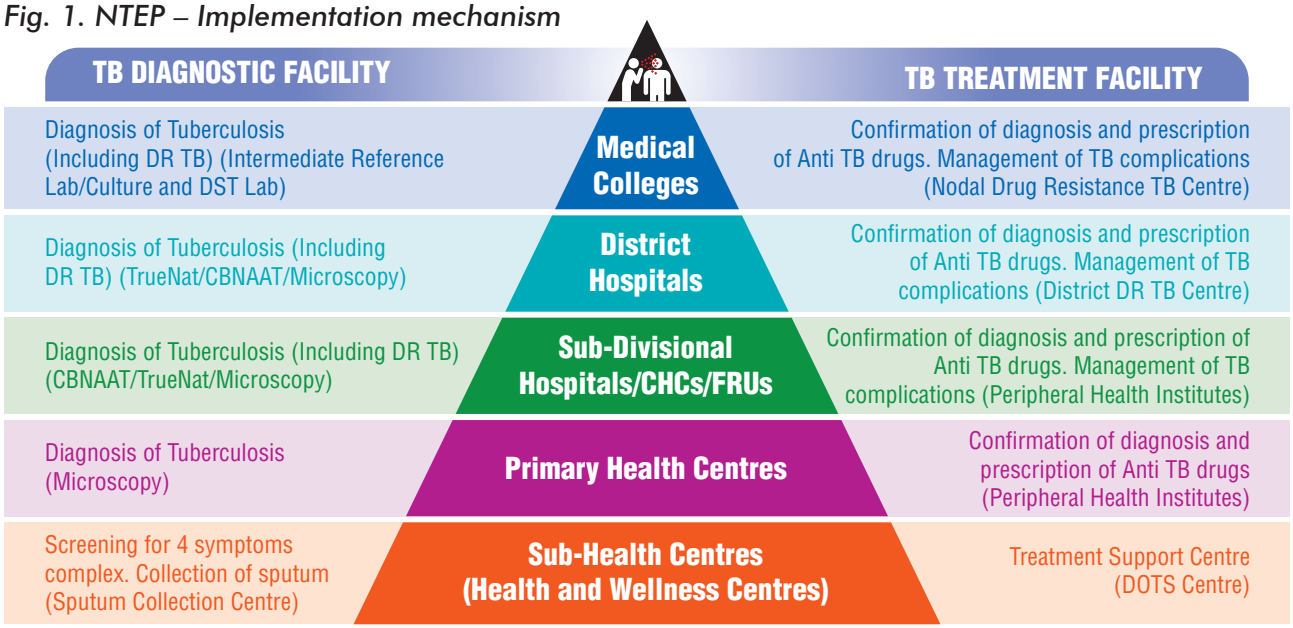
National TB Elimination Programme (NTEP)

The NTEP has a vision of achieving a "TB free India", and aims to provide Universal Access to TB control services. The programme provides various free of cost, quality TB diagnosis and

treatment services across the country through the government health system. The objectives of the programme are:

- To improve TB service utilization, rapid detection and treatment of all TB patients with quality assured diagnostics and anti-TB drugs
- Focused screening of vulnerable population using active case finding approach
- Intensified TB case finding with other health programmes
- Offering TB Preventive Therapy (TPT) for the identified at-risk and eligible population
- A multisectoral approach with involvement of various ministries and national health programmes has also been adopted to achieve the desired goal of ending TB by 2025
- To address the TB epidemic using infection control measures
- Create massive public awareness about TB prevention and TB elimination
- Establishment of community-led response

Fig. 1. NTEP – Implementation mechanism

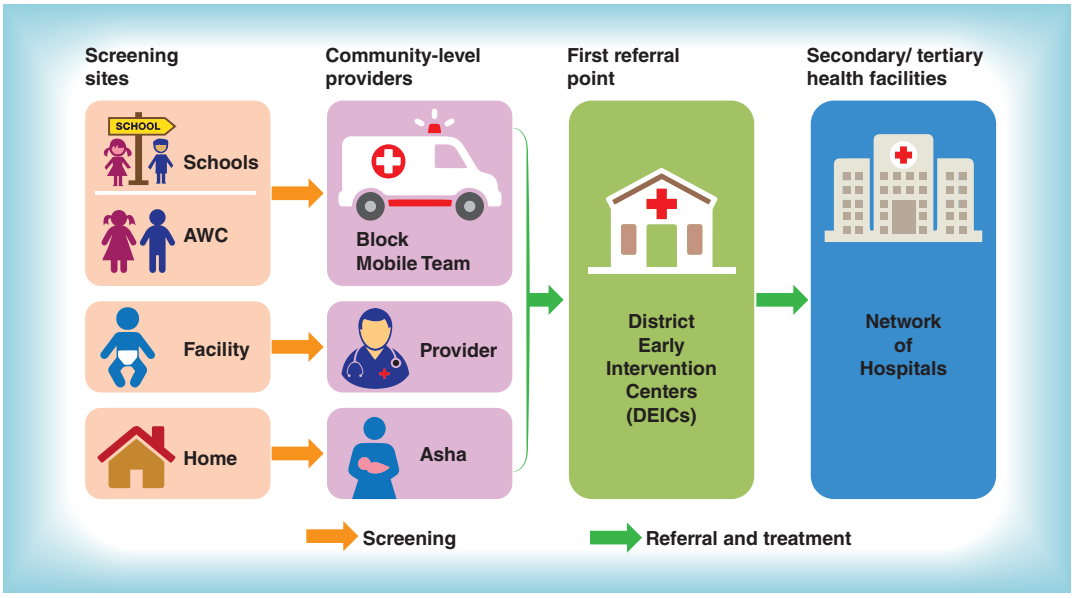


Rashtriya Bal Swasthya Karyakram (RBSK)

RBSK (child health screening and early intervention services) aims at survival and improving the quality of life of children in age group of 0–18 years. Under this programme there is a provision of comprehensive health screening and early identification of 4D's: Defects at birth, Diseases, Deficiencies and Developmental delays in children aged 0 to 18 years through Anganwadis and schools, and further linkages to care, support and treatment. The screening is done by Mobile Health Teams (MHT). RBSK is expected to perform comprehensive screening of more than 27 crore children in a phased manner.

Mobile Health Teams (MHT) comprise of a Medical Officer, an Auxiliary Nurse-Midwife (ANM)/ Staff Nurse and a Pharmacist and screen children for 32 health conditions (for details see Annexure 6) as per their structured screening protocol. Screening is done at the Anganwadi Centre twice a year for children in the 0–6 years age group and, at government and government-aided schools once a year for the 7–18 years age group.

Fig. 2. RBSK – Implementation mechanism



Rashtriya Kishor Swasthya Karyakram (RKSK)

RKSK aims to increase availability and access to health related information to the adolescent population. It generates demand and improve accessibility as well as utilization of quality counselling and health related services for adolescents. It forges multisectoral partnerships to create a safe and supportive environment for the adolescent population in the country.

RKSK addresses Sexual Reproductive Health (SRH), Nutrition, Non-Communicable Diseases (NCD), Substance Misuse, Mental Health, Injuries and Violence (including GBV) through a health promotion approach, which is a paradigm shift from the previously existing clinic and facility-based approach. This comprehensive programme is aimed at encouraging adolescents to take an informed decision on their health issues and realize their full potential. The services in RKSK are provided through:

A. Facility-based interventions

B. Community-based interventions

C. School-based interventions

Adolescent Friendly Health Clinics (AFHCs) are dedicated spaces for adolescents in the existing health system at the level of PHC, CHC, SDH, DH and medical college. Dedicated counsellors are available at the block level or CHC upwards.

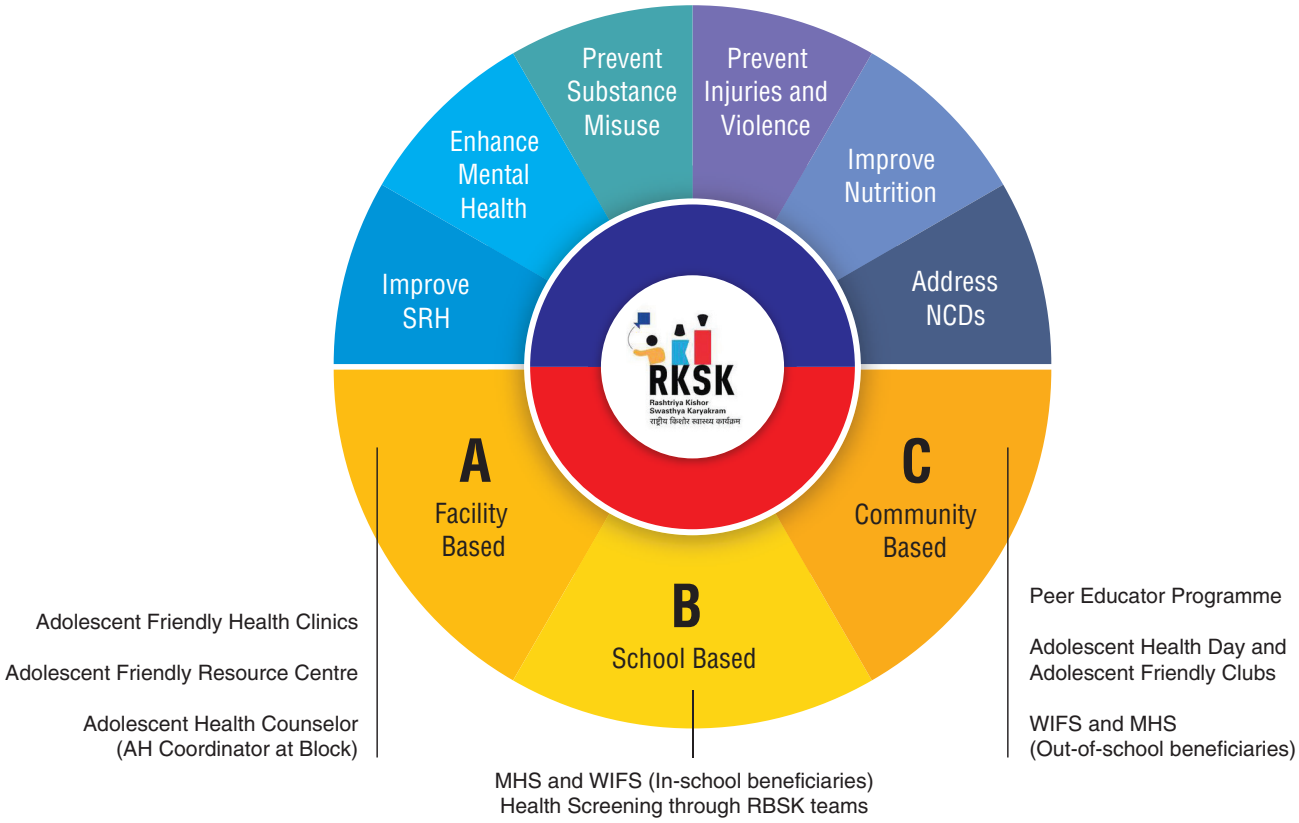
Peer Educators (PEs)/ Saathiya are adolescents selected by members of Village Health, Sanitation and Nutrition Committee (VHSNC) facilitated by ASHAs, based on their communication skills, motivation and interest to lead such an activity. Every village, has at least four PEs i.e., two male and two female per village/1000 population/ASHA. Peer Educators promote early health seeking behaviour.

Adolescent Health Days (AHD) are organized in every village once every quarter and are used to increase awareness among adolescents, parents, families and stakeholders about the determinants of adolescent health such as nutrition, SRH, mental health, injuries and violence (including GBV), substance misuse and NCDs. These AHD will now also be used to spread awareness on TB and messages on cough etiquette.

Weekly Iron and Folic Acid Supplementation (WIFS) entails the provision of weekly supervised iron folic acid (IFA) tablets to in-school boys and girls and out-of-school girls, and biannual albendazole tablets for helminthic control for prevention of iron-deficiency anaemia. The programme is being implemented across the country in both rural and urban areas, covering government, government-aided and municipal schools, and Anganwadi centres.

The Scheme for Promotion of Menstrual Hygiene (MHS) among adolescent girls in the 10–19 years age group, with specific reference to increase awareness among adolescent girls on menstrual hygiene, increase access to and use of high quality sanitary napkins by adolescent girls and, ensure safe disposal of sanitary napkins in an environmentally friendly manner.

Fig. 3. RKSK – Implementation mechanism



III. INTEGRATED HEALTH SERVICES DELIVERY FRAMEWORK

The overall purpose is to articulate the national policy for collaborative activities between health programmes of NTEP, RBSK and RKSK so as to fast-track the TB elimination efforts in the country.

Goal: To reduce morbidity and mortality associated with TB in children and adolescent population through

- Prevention
- Early detection
- Prompt and complete management of TB

This strategy would be achieved through the following approaches:

- Enhancing community awareness on TB in children and adolescent population
- Generating demand and promoting disease prevention and early health seeking behaviour
- Increasing the early detection of children with TB symptoms and further tracking for timely TB diagnosis and treatment initiation

Symptoms of presumptive TB

- Cough >2 weeks
- Fever >2 weeks
- Definitive Weight Loss/ failure to thrive
- History of Contact/Exposure to Pulmonary TB in past 2 years
- Gradually enlarging painless lymph node, especially in the neck
- Swelling in the back – Gibbus deformity

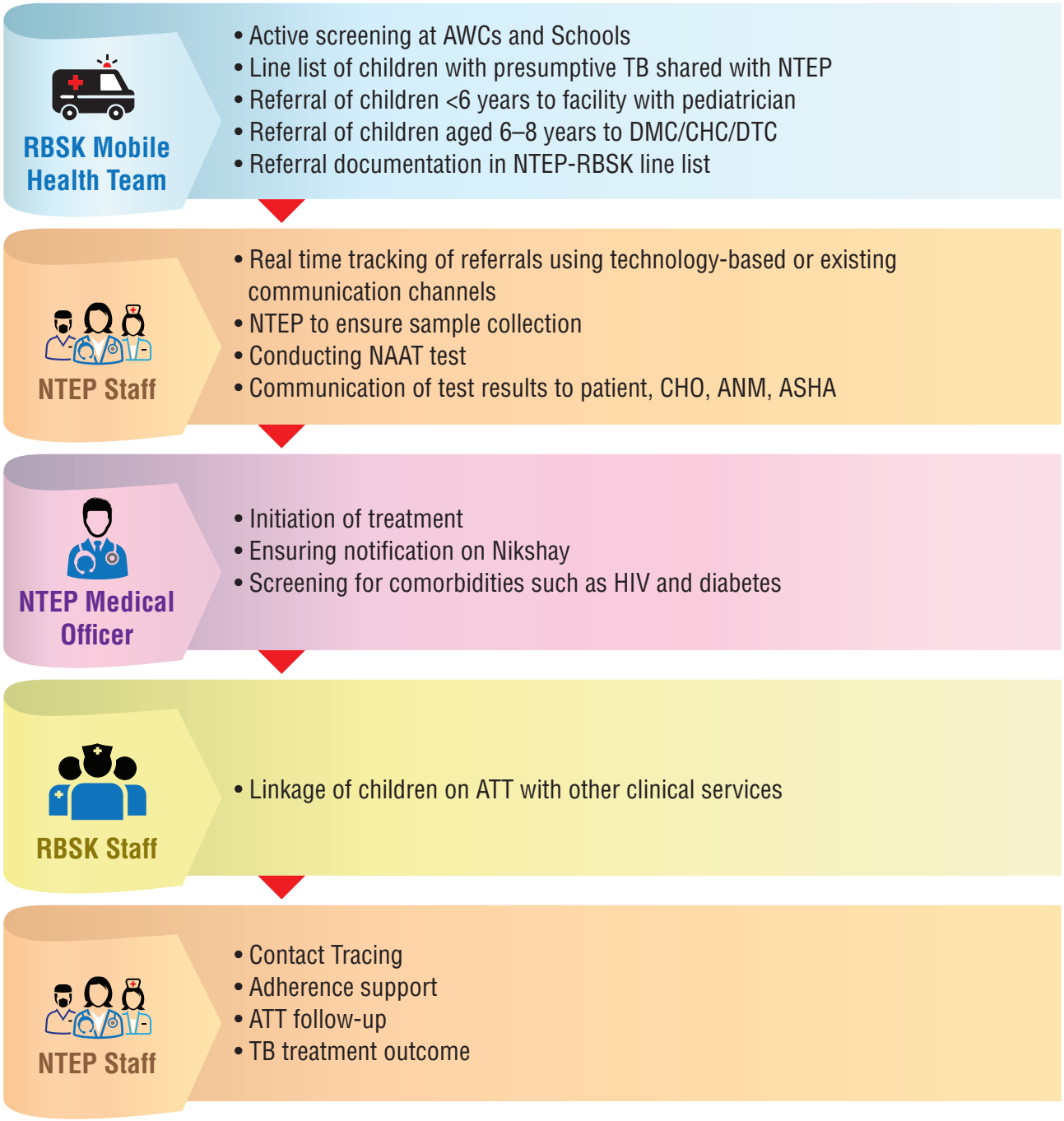
How to diagnose TB

- Chest X-ray done upfront for all children with presumptive TB cases
- Nucleic Acid Amplification Test (CBNAAT/TruNat) preferred over smear microscopy examination in all children with presumptive TB
- Gastric Aspirate (GA) / Lavage (GL) and Induced Sputum (IS) used to obtain samples from children, especially when they are unable to produce sputum

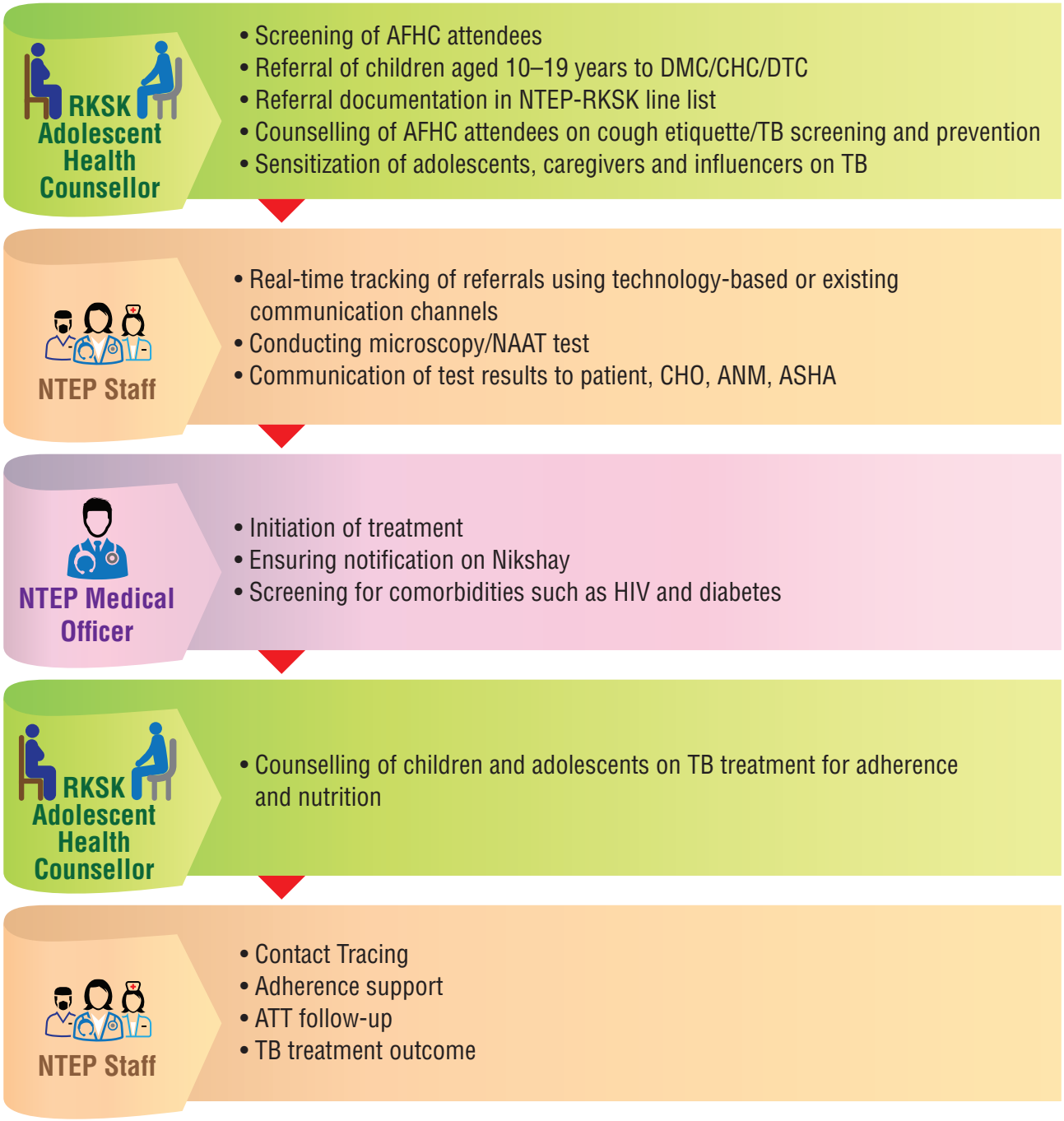
Activities to be done by RBSK and RKSK

- Active Screening for TB by Mobile Health Team (MHT) and verbal screening by the Counsellor at the Adolescent Friendly Health Clinic (AFHC).
- All identified presumptive TB cases to be referred by the MHT/AFHC in charge to the NTEP using NTEP referral forms (Annexure 5).
- Children in age group of 0–6 years to be referred to nearest facility having a pediatrician (list of pediatrician or health facilities with pediatrician available under the health system should be available with NTEP, RKSK and RBSK to ensure smooth coordination).
- Children aged 6–18 years to be referred to nearest Designated Microscopy Centre (DMC) for diagnosis of TB.
- All referrals from MHT/AFHC to be documented in NTEP-RBSK/RKSK Line List to ensure linkages to services and tracking (Annexure 5). In order to track the referred cases, real time information sharing on referrals to be ensured among focal persons of local NTEP/RBSK/ RKSK units using existing communication channels.
- Outreach activities by AH Counsellors can stress on TB also along with the six key priorities identified under RKSK.
- AFHC team will provide integrated counselling for reduction of risk factors for TB (including under-nutrition, NCDs), improve treatment adherence through substance misuse prevention, increase uptake of TB preventive therapy and improve quality of life through supporting mental and emotional well-being.
- Adolescent Health and Wellness Days will also highlight the symptoms, causes, prevention and treatment available for tuberculosis.
- Peer Educators will also discuss ill effects of TB, risk factors and its prevention. Suspected cases to be referred to the AFHC.
- Leverage the national emergency helpline (112), Nikshay Sampark (call centre), and Adolescent Helpline in raising awareness and linkages to TB and health related services.
- Disseminate information on cough etiquette/TB screening/TB Prevention at AFHCs using TB IEC materials provided by the NTEP division.
- Leverage NTEP staff at local level for all TB related activities, wherever needed.
- AFHC service providers will raise awareness on TB as one of the causes of menstrual abnormalities and even infertility (the prevalence of genital TB among women with infertility is 24.2% (ranging from 18.5% to 29.99%);[4] and the incidence of infertility among Genital TB cases is between 40% to 80%).[5]

Flow-chart of activities – RBSK/NTEP



Flow-chart of activities – RKSK/NTEP

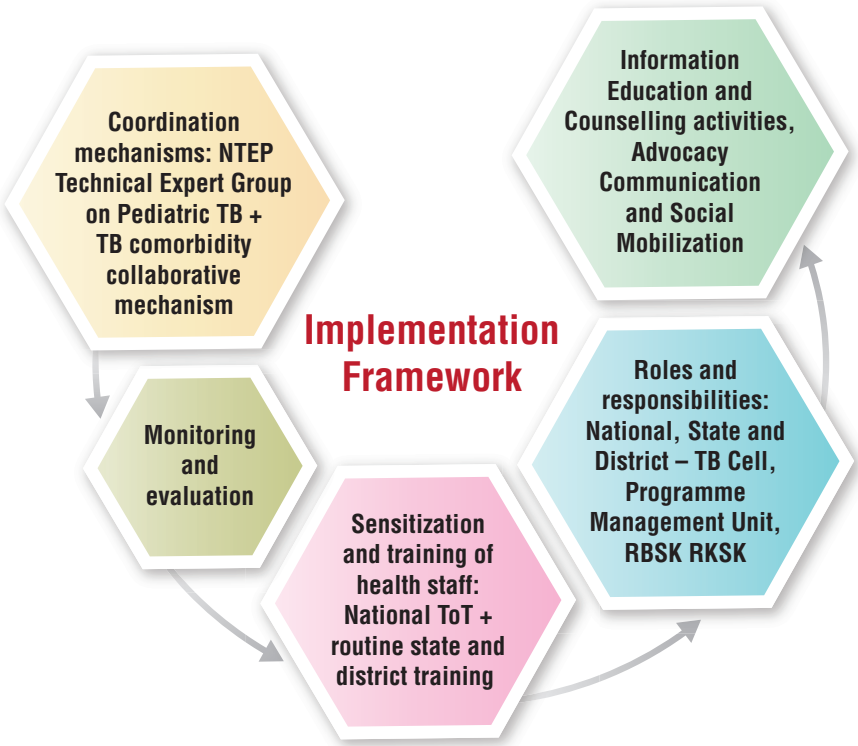


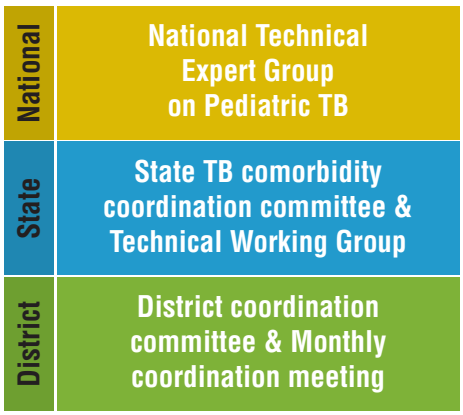
Activities to be done by NTEP

Once a presumptive TB case is referred by MHT/AFHC to NTEP services, child will be tested for TB.

- TB is diagnosed through chest X-ray, NAAT and microscopy. Children who cannot expectorate sputum need sample collection through methods as gastric aspirate, gastric lavage and induced sputum.
- The NTEP will ensure sample collection for all children referred by the RBSK and RKSK to the DMCs, where the sample can be collected and transported to the nearest NAAT site. If required, the child can further be referred to CHC/District TB Centre (DTC).
- Tracking has to be a coordinated effort between NTEP and health system till the completion of diagnosis as TB or non-TB.
- Hence, the real time information on referrals shared by MHT/AFHC has to be tracked by NTEP staff with the support of health system/frontline health workers using existing communication channels or technology-based communication processes, whichever is available.
- All those diagnosed with TB, will be initiated on anti-TB treatment (ATT) by NTEP, which is available up to village level and patients will be notified via Nikshay.
- All patients on ATT will be screened for comorbidities like HIV, diabetes, ensuring initiation of TB treatment and followed-up till completion of treatment by NTEP.
- Reverse linkages with AFHC and RBSK services in adolescents/children already diagnosed with TB for other counselling/clinical services.
- Creating awareness among adolescent population and local communities on TB, their vulnerability, associated risk factors and ensuring linkages to appropriate services, along with RKSK and RBSK teams.
- Participate in quarterly Adolescent Health & Wellness Days (AHWDs), community awareness activities, based on the need.
- To undertake mapping of AFHCs in Nikshay to ensure appropriate linkages and for monitoring of activities.

Coordination mechanisms





National Technical Expert Group on Pediatric TB under NTEP would include representatives from RBSK and RKSK to provide guidance on programme policy and oversee implementation of collaborative activities (Annexure 1).

Existing TB comorbidity collaborative mechanisms under NTEP at State and District levels under the chairpersonship of Principal Secretary (Health) and District Magistrate respectively would integrate NTEP-RBSK-RKSK collaborative activities (Annexure 2).

Sensitization and training of health staff

- National level Training of Trainers on NTEP-RBSK-RKSK collaborative framework.
- Training/sensitization of other state/district-level nodal officers and district/sub-district level healthcare workers would be carried out through routine trainings under both programmes, with updated training materials incorporating information related to NTEP-RBSK-RKSK collaborative framework.

Roles and responsibilities

1	Role and Responsibilities at National Level	
	Central TB Division	**National Programme Management Unit, RBSK/RKSK**
	• Programmatic oversight, coordinate NTEG meetings and monitoring implementation • Training of NTEP nodal person in states • Leveraging digital platforms with support of RBSK-RKSK – Call centre, inter-linking MIS tools	• Programmatic oversight, participation in NTEG meetings and monitoring implementation of collaborative framework
2	**Role and Responsibilities at State Level**	
	State TB cell	**State Programme Management Unit, RBSK/RKSK**
	• Developing joint action plans, coordinate State coordination meetings and undertake joint supervisory visits • Training of NTEP nodal person in districts • Training of RBSK/RKSK nodal person in states • Ensure provision of funds in PIP and provide funds for relevant trainings of collaborative framework • Developing and disseminating joint IEC materials	• Developing joint action plans for implementation, participate in monthly State coordination meetings and undertake joint supervisory visits • Developing and disseminating joint IEC materials

3	Role and Responsibilities at District Level	
	District TB cell	**District Programme Management Unit, RBSK/RKSK**
	• Implementation of framework and coordinate district coordination meetings • Sensitization of NTEP staff at district/ block level including as part of Adolescent Health Day • Training of RBSK/RKSK nodal person in districts • Establish linkages of TB diagnostic labs/ treatment support centres with MHT, DEIC and AFHC • Making available posters on TB in the AFHC and with MHTs • Updating and sharing of NTEP-RBSK-RKSK line list, and providing feedback on the line list	• Participate in monthly district coordination meetings • Sensitization of MHT, AFHC staff and PE at district/block level • Establish linkages of MHT, AFHC with TB diagnostic labs/treatment support centres • Sharing of NTEP-RBSK-RKSK line list

Specific role of NTEP supervisory staff (Senior Treatment Supervisor/ Senior TB Lab Supervisor, TB Health Visitor)

- Ensuring linkages of patients referred from MHT, DEIC and AFHC to TB Diagnostic Labs where sample will be collected for TB diagnosis
- Treatment initiation details of the children referred to be shared with the RBSK/RKSK
- Ensuring referral of TB patients with comorbidities (substance abuse, malnutrition) to AFHCs for counselling support
- Recording of referrals from MHT and AFHC in Nikshay
- Attending at least one Adolescent Friendly Club meeting organized monthly in sub-centre, where Peer Educator programme is being implemented

Specific role of Mobile Health Teams

- Children in the age group 0–6 and 6–18 years are screened for TB as one of the 32 health conditions as per the structured screening protocol
- Reporting of TB screening in MHT and DEIC

Specific role of AFHC level service providers (MO, ANM, Counsellors)

- Verbal Screening of AFHC attendees for TB and linkage to appropriate services
- Display of appropriate IEC material related to TB
- Reporting of TB screening in AFHC register/reports

Role of Peer Educators

- Spreading awareness on TB and emphasizing on cough etiquette
- Support adherence and follow up for TB and refer for counselling services during Adolescent Health and Wellness Days and Adolescent Friendly Clubs

Advocacy, communication and social mobilization/information education and counselling activities

- Joint IEC activities and campaigns would be carried out through materials developed on health promotion, TB prevention, health education related to cough etiquette and infection

prevention, TB diagnosis and treatment services along with the social support systems available

- IEC materials related to TB would be made available in DEIC, AFHCs and in the repository in Adolescent Friendly Health Resource Centre (AFHRC)
- Adolescent Health Day and Adolescent Friendly Clubs would spread awareness on TB and messages on cough etiquette
- PEs (Saathiya) would be sensitized on TB (prevention and availability of services) to promote early health seeking behaviour

Monitoring and evaluation

- Periodic data sharing, completion of line list and sharing feedback of line list, joint review and supervisory visits by both programmes officials
- Standard template for review meeting and checklists for supervisory visits prepared based on standard monitoring indicators
- In-referral from AFHC and linkages to AFHC for counselling/clinical services to be captured in Nikshay
- Monitoring of diagnosed TB patients along cascade of care upon diagnosis of TB, including screening for comorbidities
- Details on TB related services (counselling, screening and referral) captured in service delivery register, reporting format of PE (outreach activities register) in AFHCs

Supervision and monitoring indicators

Supervision and monitoring indicators			
Sr. No.	Numerator	Denominator	Division Responsible
1	Number of children screened by MHT/ AFHC in particular month	None	RBSK and RKSK
2	Number of presumptive TB identified and referred by MHT/ AFHC	Number of children screened by MHT/ AFHC in particular month	RBSK and RKSK
3	Number of presumptive TB undergone TB testing under NTEP	Number of presumptive TB identified and referred by MHT/ AFHC	NTEP
4	Number of children diagnosed with TB by NTEP	Number of presumptive TB undergone TB testing under NTEP	NTEP
5	Number of pediatric TB cases initiated on treatment by NTEP	Number of children diagnosed with TB by NTEP	NTEP
6	Number of pediatric TB patients successfully completing treatment	Number of pediatric TB cases initiated on treatment by NTEP	NTEP

Note: Data for RBSK to be disaggregated by 0–6 years and 6–18 year
Data for RKSK to be among children 10–19 years

Research by NTEP

- To understand TB epidemiology in adolescent population
- To identify and establish TB associated risk factors (social, psychological and environmental) in adolescent TB patients (regional and state specific variations)
- To identify barriers in health seeking behaviour for TB diagnosis and treatment in adolescent population
- To identify operational challenges in provision of TB services under RKSK NTEP collaborative activity service package
- To understand factors influencing successful TB treatment

References:

1) Global tuberculosis report (2020) Geneva: World Health Organization; Available at: https://www.who.int/publications/i/item/9789240013131
2) Census of India (2011). Office of the Registrar General, Ministry of Home Affairs, Government of India.
Available at: https://censusindia.gov.in/vital_statistics/SRS_Report/9Chap%202%20-%202011.pdf
3) Population projections for India and States (2011–2036). Report of the Technical Group on Population projections. November 2019.
Available at: https://nhm.gov.in/New_Updates_2018/Report_Population_Projection_2019.pdf
4) García-Basteiro, A.L., Schaaf, H.S., Diel, R., and Migliori, G.B. (2018). Adolescents and young adults: a neglected population group for tuberculosis surveillance.
Available at: https://erj.ersjournals.com/content/51/2/1800176
5) Sant'Anna, C.C., Schmidt, C.M., March, M. de F.B.P., Pereira, S.M., and Barreto, M.L. (2013). Tuberculosis among adolescents in two Brazilian State capitals. Cadernos de Saúde Pública, 29(1), 111–116.
Available at: https://www.scielosp.org/article/csp/2013.v29n1/111-116/
6) Kefayat C.A., Amin B.M., Elham B. et al. Prevalence of genital tuberculosis among infertile women: A systematic review and meta-analysis. Int J Med Res Hlth Sc. 2016, 5 (4), pp 208–15
Available at: https://www.ijmrhs.com/medical-research/prevalence-of-genital-tuberculosis-among-infertile-women-a-systematic-review-and-metaanalysis.pdf
7) Sharma J.B., Sharma, et al. Female genital tuberculosis: Revisited. Indian J Med Res 2018;148, Suppl S1:71–83
Available at: https://www.ijmr.org.in/article.asp?issn=0971-5916;year=2018;volume=148;issue=7;spage=71;epage=83;aulast=Sharma

Annexure 1: National technical expert group on pediatric TB

Z-28015/57/2007 – TB
Ministry of Health and Family Welfare
Central TB Division

Nirman Bhawan, New Delhi
Dated: 12th October 2018

OFFICE MEMORANDUM

Sub: National Technical expert group on Pediatric TB – Reg.

The Government of India has set an ambitious goal to eliminate Tuberculosis by 2025, five years ahead of the global targets. The actual pediatric burden is nearly 10%, while only 6-7% of the cases are reported under the programme. In order to address this gap, a 'National Technical Expert Committee on Pediatric Tuberculosis' has been constituted as follows.

The Terms of Reference (TOR) is as follows:

- To finalize the revised Pediatric TB management guidelines under the RNTCP
- Contribute to regular updating the evidence base, national policy and guidelines relating to Pediatric TB management
- Identify and prioritize research needs, including operational research on key programme issues regarding Pediatric TB management
- To oversee implementation of the Pediatric TB management guidelines under the programme

The composition of this technical working group is as follows:

1. Dr Varinder Singh – Director Professor, Dept of Pediatrics, LHMC, New Delhi (Chairman)
2. Dr Sushil K Kabra – Professor, Dept of Pediatrics, AIIMS New Delhi (Subject expert) (Co-Chair)
3. Dr. Sangeeta Sharma, HOD, Dept of Pediatrics, NITRD, (Subject expert) (Co-Chair)
4. Director, NTI, Bengaluru (ex-officio)
5. Dr Vijay Yewale, Apollo Hospital, Navi Mumbai, (Subject expert)
6. Dr Tanu Singhal, ID expert, Kokilaben Ambani Hospital, Mumbai (Subject expert)
7. Dr Winsley Rose, CMC Vellore (Subject expert)
8. Dr Ira Shah, B J Wadia Hospital, Mumbai (Subject expert)
9. President, IAP (ex-officio) - Dr Santosh Soans
10. DDG (TB), CTD, MoHFW (ex-officio)
11. Commissioner (CH), MoHFW (ex-officio)
12. Dr Syed Imran Farooq, Project Director - Challenge TB
13. Dr Gagan Gupta - Health Specialist, UNICEF
14. State TB Officer and WHO RNTCP Consultant (Jharkhand)

In addition to this, following are the standing invitees for committee meeting

1. Officers and consultant in-charge from Central TB Division and Child Health Division
2. Medical Officer (TB) and National Professional Officers, WHO country Office, New Delhi
3. Chairs and co-chairs of the relevant committees on diagnosis of TB, treatment of TB & other committees

The Chair of this technical working group can co-opt other members based upon their expertise in experience required for the comprehensive fulfilment of these terms of reference. The tenure of this committee is 3 years from the date of its constitution. The chairs and co-chairs of the relevant committees on diagnosis of TB, treatment of TB and other committees would be invitees for the meeting.

Operation/Frequency of Meetings:

The committee would meet bi-annually. The expenditure towards entitled TA/DA for the committee members in the meetings needs to be borne by their respective health society/ institutes/ organizations.

Dr K S Sachdeva
DDG (TB), Central TB Division

To:

1. All constituent members of the Technical working group on Pediatric TB in India
2. Chairs and co-chairs of the relevant committees on diagnosis of TB, treatment of TB & other committees

Copy for information to:

1. PPS to AS & DG (RNTCP & NACO), MoHFW
2. PPS to JS (VS), MoHFW

Annexure 2: State and district level TB comorbidity committee

NATIONAL HEALTH MISSION
प्रीति सूदन
सचिव
PREETI SUDAN
Secretary

सत्यमेव जयते

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण विभाग
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
Government of India
Department of Health and Family Welfare
Ministry of Health & Family Welfare

D.O.No. Z.28015/108/2018-TB(Pt.I(Pt.2)
Dated : 2nd August, 2019

Dear Secretary,

The Government of India has set an ambitious goal to eliminate Tuberculosis by 2025, five years ahead of the global targets. The National Strategic Plan 2017-25 for TB Elimination by 2025 identifies people with co-morbidities as having increased risk of TB because of biological or behavioural factors that compromise the immune system. Nearly 7, 5, 3 and 1 lakh cases of TB annually are contributed by Malnutrition, DM, Tobacco usage and HIV. Moreover, 44500 TB cases are estimated to occur among pregnant women. All have a bidirectional relationship with Tuberculosis, resulting in high Morbidity & mortality rates. Undernutrition at the population level contributes to an estimated 55% of annual TB incidence in India. Diabetes increases the risk of developing TB, with nearly two-three times higher risk. Smoking increases the risk of TB disease by more than two-and-a-half times. PLHIV are 21 (16-27) times at higher risk of developing TB. Presence of tuberculosis disease during pregnancy is known to result in unfavourable outcomes for both pregnant women and their infants

The National TB-HIV Coordination Committee and National Technical working group for TB-HIV have been reconstituted as National TB-comorbidity Coordination Committee and National Technical working group for TB-comorbidities. As per the recommendation of the 1st Meeting of National Technical working group on TB-Comorbidities, the State and District level committees (Coordination committee, Technical working group and monthly review) constituted for implementation of the TB-HIV collaborative framework would be replaced by TB-comorbidity committees to address all co-morbidities. The generic Terms of Reference, Composition and agenda have been annexed.

It will be appreciated if the committees are constituted at the earliest in order to effectively address burden of comorbidity among TB patients.

Warm regards.

Yours sincerely,

(Preeti Sudan)

Principal Secretary (Health), All State and UTs

Tele : (O) 011-23061863, Fax : 011-23061252, E-mail : secyhfw@nic.in
Room No. 156, A-Wing, Nirman Bhavan, New Delhi-110011

Annexure 3: Collaboration between the NTEP, RBSK, RKSK and NLEP for elimination of childhood TB and leprosy

Z-28015/05/2018-TB
Government of India
Ministry of Health and Family Welfare

Nirman Bhawan, New Delhi
Dated: 1st October, 2020

Sub: National TB Elimination Programme (NTEP) - Rashtriya Bal Swasthya Karyakram (RBSK) – National Leprosy Eradication Programme (NLEP)-Rashtriya Kishor Swasthya Karyakram(RKSK) Collaboration to address burden of Tuberculosis and Leprosy among children

Dear Madam/Sir

India has 27 crore children and nearly 3.42 lakh Tuberculosis cases occur annually among this age group, amounting to the highest burden of TB among children. This age group is not only more vulnerable to TB, but TB amongst children is distinct from other age groups in terms of incidence, disease manifestations, difficulties in diagnosis and timeliness of response to treatment. Moreover, TB among children accounts for nearly 40% of the missing TB cases in the country. Government of India is committed to Ending TB by 2025. Likewise, India reports the highest number of child leprosy cases in the world, with more than 55% of the world child cases being in India. If not detected and treated in time, leprosy causes severe grade 2 disabilities resulting in lifelong suffering. India is committed to achieve leprosy free status with a special focus on achieving the target of zero case of child grade 2 disability.

As per DO Z-28020-10-2019-RBSK-CH dated 09th August 2019, State/UTs had been advised to screen for TB and Leprosy among children 0-6 years at Anganwadis and children 6-18 years enrolled in Government and Government aided Schools under the RBSK. The aim of this activity is to reduce morbidity and mortality associated with TB and Leprosy in children through Prevention, Early detection and Prompt management and Treatment. An analysis of State-wise profile of TB cases notified among children under NTEP is at **Annexure 1**. The contact details of nodal officers and WHO NTEP consultants in each State/UT is at **Annexure 2**.

Adequate resources for training and awareness generation activities may be budgeted in the PIP for 2021-22. A National level virtual training of trainer's activity will be held ~~or~~ in October, 2020. Details of the training modules for sensitization of medical officers and other healthcare workers is enclosed. We request your support in effective implementation of this collaborative activity in order to End TB and achieve Leprosy free status among the children and adolescents.

Vikas Sheel 1/10/20
Vikas Sheel
JS (NTEP)

Manohar Agnani
JS (RCH)

Rekha Shukla
JS (NLEP)

Encl: As mentioned above

To

Principal Secretary Health and MD (NHM), all States/UTs

Annexure 4: Financial support available under NHM for TB related activities

A. Incentives

Individual incentives are available under NTEP heads and team-based incentives are available under AB-HWC heads for TB related activities.

Sr. No.	Particulars	Amount	Eligibility
Incentives available under NTEP			
1	Informant incentive for referring presumptive TB patients to public facility	INR 500 per patient detected with TB on referral to a government health facility by said informant	Available for confirmed TB patient
2	Private Provider Incentive	INR 500 per TB patient notified and INR 500 on reporting treatment outcome per patient	Private Providers (Private Practitioner, Hospital, Laboratory, and Chemist) who notify/inform (refer) TB patients to NTEP on Nikshay and declare the outcome.
3	Treatment supporter incentive	INR 1000 per DSTB patient and Patients on H-Monopoly and INR 5000 per DRTB patient for 'Treatment Supporter' on completion of treatment	On the update of Outcome for Drug sensitive TB patients INR 2000 on completion of Intensive phase (IP) and INR 3000 on completion of continuation phase (CP) of treatment for Drug-Resistant TB patients
4	Transportation support for patients from tribal area	INR 750 as one-time support	Upon notification for TB patient notified from notified Tribal areas
5	Transportation support for DRTB patients	As per rates defined by State Government	All DR-TB patients
6	Injection charges for DRTB patients	INR 25 per injection	For persons who are not supported by government for providing injection to DRTB patient
7	Nikshay Poshan Yojana – To provide nutritional support to TB patients at the time of notification and subsequently during the course of treatment	INR 500 for a treatment month paid in installments of up to INR 1000 as an advance	All unique TB patients notified on or after 1st April 2018 (including all existing TB patients under treatment for at least one month from this date)

B. Financial Support available for other TB related activities

- Screening, referral linkages and follow-up under Latent TB Infection Management
- Incentives for Active TB Case Finding
- Community meetings
- Patient provider meetings
- School/college-based activities
- Sensitization of private providers, NGOs, PRIs
- IEC activities such as folk, mela, street plays, signages, wall paintings, wall writings, Hoardings, banners, miking

Funding for the above will be as per the rates and plan approved by respective State/UT Governments under NHM.

Annexure 5: NTEP referral slip and NTEP-RBSK/RKSK line list

SR No. _____

REFERRAL SLIP
(Referring health facility copy)

Date: .....Lab referred to:.....
Name of referring HF: .....
Name of Patient: .....
Age: ..... years Sex: M / F / TG
Address of patient (with landmarks)

.....

.....

.....
Patient's / Contact person's Mobile number :

_____
Kindly tick
- ☐ Cough.....days
- ☐ Fever.....days
- ☐ Loss of weight .....days
- ☐ Night sweat .....days
- ☐ Blood in sputum/ cough .....days

☐ Contact of TB / MDR TB

Patient ID. _____ _____

Stamp of HF Referred by (Name & Sign)

SR No. _____

REFERRAL SLIP
(Patient copy)

Date: .....Lab referred to: .....
Name of referring HF: .....
Name of Patient: .....
Age: ..... years Sex: M / F / TG
Address of patient (with landmarks)

.....

.....

.....
Patient's / Contact person's Mobile number :

_____
Kindly tick
- ☐ Cough.....days
- ☐ Fever.....days
- ☐ Loss of weight .....days
- ☐ Night sweat .....days
- ☐ Blood in sputum/ cough .....days

☐ Contact of TB / MDR TB

Patient ID. _____ _____

Stamp of HF Referred by (Name & Sign)

SR No. _____

REFERRAL SLIP
(Lab Copy)

Date: .....Lab referred to:.....
Name of referring HF: .....
Name of Patient: .....
Age: ..... years Sex: M / F / TG
Address of patient (with landmarks)

.....

.....

.....
Patient's / Contact person's Mobile number :

_____
Kindly tick
- ☐ Cough.....days
- ☐ Fever.....days
- ☐ Loss of weight .....days
- ☐ Night sweat .....days
- ☐ Blood in sputum/ cough .....days

☐ Contact of TB / MDR TB

Patient ID. _____ _____

Stamp of HF Referred by (Name & Sign)

NTEP-RBSK/RKSK Line List for referral and diagnosis for TB

Reporting Month:	Reporting Year:
Mobile Health Team ID:	District/Block:

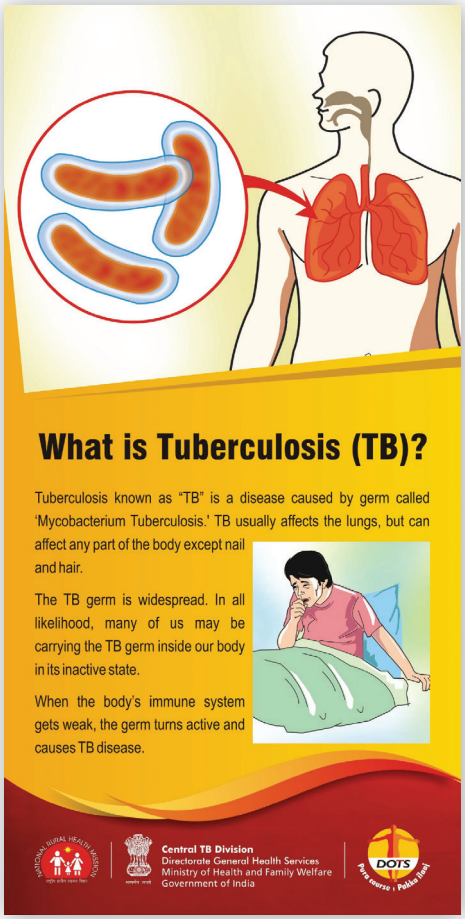
To be completed by RBSK Mobile Health Team/AFHC								To be completed by NTEP			
1	2	3		4	5	6	7	8	9	10	11
S. No.	Name of the child	Name of the parent/guardian	Age/Sex	Complete Address	Phone number (pls specify relation to child)	Date of referral to NTEP (DD/MM/YY)	Name of District TB Centre/ NTEP facility referred to	Is child diagnosed with TB (Yes/No/NA)*	If diagnosed with TB, specify TB NIKSHAY ID	Whether initiated on treatment (Yes/No)	Remarks

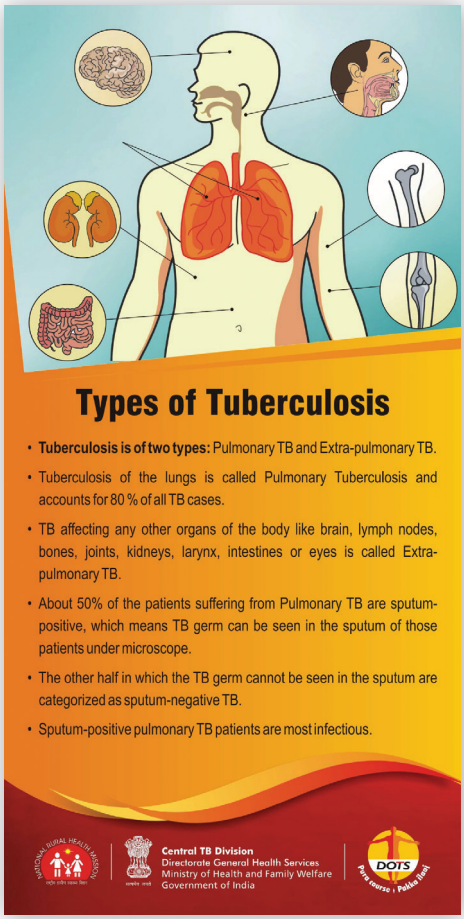
Annexure 6: Health Conditions Identified for Screening by the RBSK

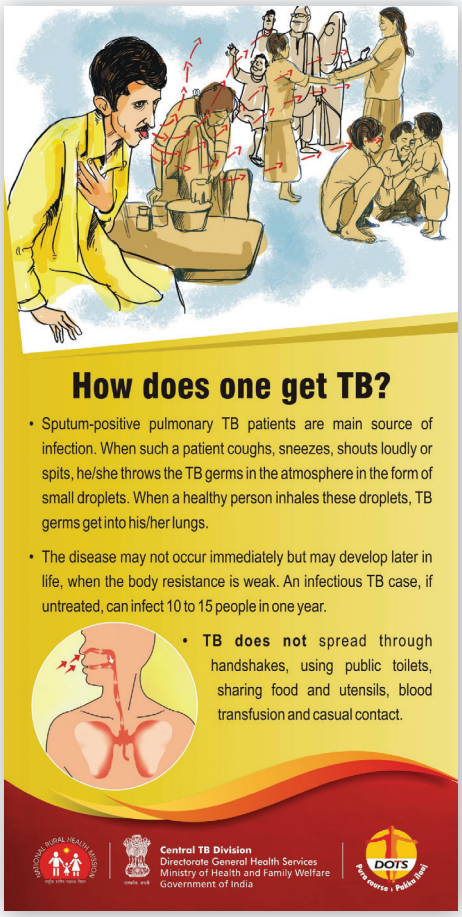
Child Health Screening and Early Intervention Services under NRHM envisage to cover 30 identified health conditions for early detection and free treatment and management. Based on the high prevalence of diseases like hypothyroidism, sickle cell anaemia and beta thalassemia in certain geographical pockets of some States/UTs, and availability of testing and specialized support facilities, these States and UTs may incorporate them as part of this initiative.

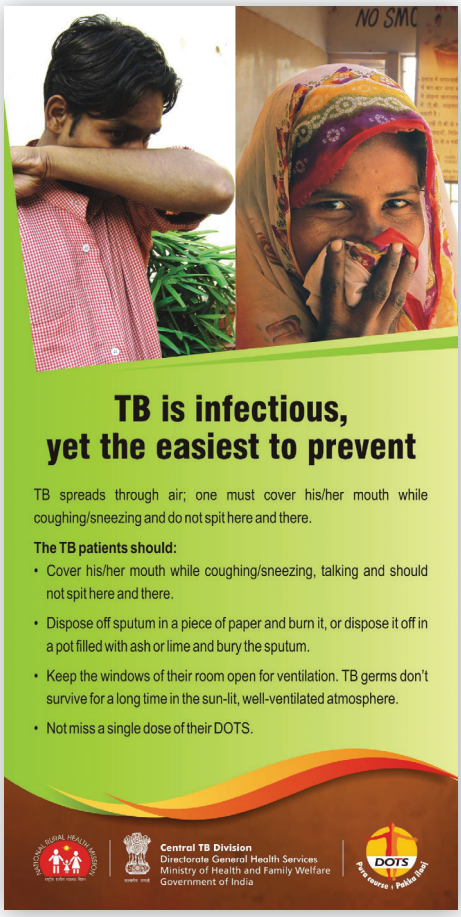
<table>
<tr><th colspan="2">Identified Health Conditions for Child Health Screening and Early Intervention Services</th></tr>
<tr><td>Defects at Birth
1. Neural Tube Defect
2. Down's Syndrome
3. Cleft Lip & Palate / Cleft Palate alone
4. Talipes (club foot)
5. Developmental Dysplasia of the Hip
6. Congenital Cataract
7. Congenital Deafness
8. Congenital Heart Diseases
9. Retinopathy of Prematurity</td><td>Defciencies
10. Anaemia especially Severe Anaemia
11. Vitamin A Deficiency (Bitot spot)
12. Vitamin D Deficiency (Rickets)
13. Severe Acute Malnutrition
14. Goiter</td></tr>
<tr><td>Childhood Diseases
15. Skin conditions (Scabies, Fungal Infection and Eczema)
16. Otitis Media
17. Rheumatic Heart Disease
18. Reactive Airway Disease
19. Dental Caries
20. Convulsive Disorders</td><td>Developmental Delays and Disabilities
21. Vision Impairment
22. Hearing Impairment
23. Neuro-Motor Impairment
24. Motor Delay
25. Cognitive Delay
26. Language Delay
27. Behaviour Disorder (Autism)
28. Learning Disorder
29. Attention Deficit Hyperactivity Disorder</td></tr>
<tr><td colspan="2">30. Congenital Hypothyroidism, Sickle Cell Anaemia, Beta Thalassemia (Optional)
31. Tuberculosis
32. Leprosy</td></tr>
</table>

Annexure 7: IEC materials









The Stigma about TB is worse than TB

There are a lot of myths and misconceptions about TB. They create apprehension and withdrawal, which reflect in our behaviour the moment we come in contact with a TB patient. But we should not stay away from a TB patient; rather help him/her recover from the disease completely.

It should be remembered that;

- Two weeks after the DOTS begins, a TB patient no longer transmits the infection to others.
- TB patient needs your love, affection and care to fight TB.

Central TB Division
Directorate General Health Services
Ministry of Health and Family Welfare
Government of India

DOTS
Pura course | Pakka ilaaj

Heard fictions about TB? Now, hear some facts

Myth: Tuberculosis is hereditary.

Fact: Tuberculosis is not hereditary. It spreads through the air. When a TB patient coughs, sneezes or speaks, he throws the germs into the air, which is inhaled by those around.

Myth: Smoking causes tuberculosis.

Fact: The cause of the infection is the mycobacterium tuberculosis. However, smokers are at an increased risk of getting TB disease.

Myth: BCG vaccination protects against developing TB.

Fact: While the vaccine prevents the severe forms of TB in childhood, it does not protect adults from developing the adult forms of pulmonary TB.

Myth: Tuberculosis affects only the lungs.

Fact: Tuberculosis primarily affects the lungs (80 percent), but can affect any part of the body except nail and hair.

Myth: An individual who has been infected with the mycobacterium tuberculosis will develop tuberculosis.

Fact: The tuberculosis infection does not always develop into tuberculosis disease. It is estimated that only about 10 percent of the infected people develop tuberculosis sometime in their lives.

Myth: A positive tuberculosis test means that an individual has tuberculosis.

Fact: The A positive Mantoux/PPD TB skin test is only a confirmation of the exposure to TB. It is not a confirmation that the disease is present.

Myth: Individuals suffering from tuberculosis should be hospitalized.

Fact: Most patients suffering from tuberculosis can be treated at home and they can continue to work.

Myth: TB germs spread through handshakes, sitting on toilet seats, or sharing dishes and utensils with someone who has TB.

Fact: TB spreads only through the air.

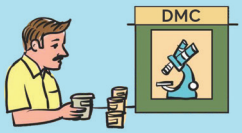
Myth: TB can be diagnosed through blood tests.

Fact: It has been shown that blood tests for TB are unreliable, show large false positive and false negative results and should not be relied upon.

Central TB Division
Directorate General Health Services
Ministry of Health and Family Welfare
Government of India

DOTS
Pura course | Pakka ilaaj

TB Harega, Desh Jeetega!



If you are diagnosed with TB, don't worry! Treatment adherence and nutrition will help you get cured.

Under Nikshay Poshan Yojana, you are eligible for nutrition support of ₹500 per month until your treatment is complete.

One, Two, Three...get DBT!

STEP 1

Jan Dhan Bank Account

- Submit your bank account details to your treatment supervisor.
- You can open a zero-balance bank account under the Jan Dhan Yojana to receive payments or register with a relative's bank account.

STEP 2

- Check your registered mobile number for notifications of the deposit.

STEP 3

- Withdraw the money from the bank or ATM, and use it to supplement your diet.
- Contact your treatment supervisor if you do not receive payments.

Contact your District TB Officer (DTO) or call the Nikshay Sampark Helpline for TB at 1800-11-6666 for information.

Concept and Design by KHPT

TB Harega, Desh Jeetega!

Use your DBT payments to eat rice, roti, dal, eggs, milk and vegetables!

Take your family's support during treatment.

Taking tablets regularly is important, but you must eat a healthy diet to recover!

Eat healthy and take your tablets even when you feel better! You will have more energy!

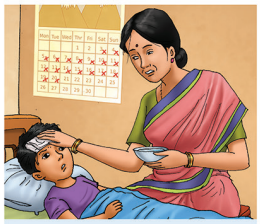
The Government of India provides each TB patient ₹ 500 per month for nutrition support during treatment through Nikshay Poshan Yojana.

Contact your District TB Officer (DTO) or call the Nikshay Sampark Helpline for TB at 1800-11-6666 for information.

Concept and Design by KHPT

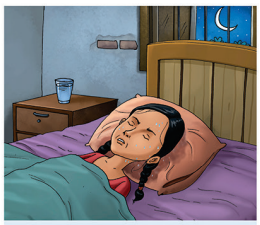
SUSPECT TB IN CHILDREN IF ANY OF THE FOLLOWING SYMPTOMS IS PRESENT

Cough more than 2 weeks and not improving



Persistent fever for more than 2 weeks

Weight loss or failure to gain weight



Night sweats

Loss of appetite

Fatigue/reduced playfulness

A CHILD IS AT RISK OF TB IF

Living in same household with a TB patient

Living in overcrowded and poorly ventilated house

Malnourished

Child with HIV

Take the child to the nearest health facility for diagnosis and treatment

PO NAME: ..... CONTACT: ..... FC NAME: ..... CONTACT: .....

NATIONAL TUBERCULOSIS ELIMINATION PROGRAMME (NTEP)

Daily FDC Regimen for Pediatric TB (Up to 18 years)

Treatment of New and Previously treated TB cases

WEIGHT BAND	INTENSIVE PHASE (IP) - 2 MONTHS									CONTINUATION PHASE (CP) - 4 MONTHS						
	Number of tablets to be consumed per day								Total number of 3-FDC strips in IP per month#	Number of tablets to be consumed per day						Total number of 2-FDC strips in CP per month#
	Pediatric 3-FDC			Ethambutol	Adult 4-FDC					Pediatric 2-FDC		Ethambutol	Adult 3-FDC			
	H	R	Z	E	H	R	Z	E		H	R	E	H	R	E	
	50	75	150	100	75	150	400	275		50	75	100	75	150	275	
4-7 kg	1			1	0				1	1		1	0			1
8-11 kg	2			2	0				2	2		2	0			2
12-15 kg	1	1	1	3	0				3	1	1	3	0			3
16-24 kg	2	1	1	4	0				4	2	1	4	0			4
25-29 kg	1	1	1	3	1				3	1	1	3	1			3
30-39 kg	2			2	2				2	2		2	2			2

• # Each FDC Strip contains 28 tablets • Children up to 18 years and weight up to 39 Kg – Use appropriate weight band of drugs for children • Children ≥ 40 Kg and TB patients above 18 years – Use appropriate adult weight band drugs • Change in the weight band should be carried out immediately when the actual patient weight crosses the range of weight band (irrespective of weight increase/decrease) • H – Isoniazid, R – Rifampicin, Z – Pyrazinamide, E – Ethambutol, FDC – Fixed Dose Combination

Published by:
Ministry of Health and Family Welfare
Nirman Bhawan, Maulana Azad Road
New Delhi - 110011
www.mohfw.gov.in / www.mohfw.nic.in

Developed with Technical Support from:
CaP TB - SAATHII/EGPAF/Unitaid

Unitaid
Innovation in Global Health

Elizabeth Glaser
Pediatric AIDS Foundation
Fighting for an AIDS-free generation

SAATHII
Solidarity and Action Against The HIV Infection in India

Nikshay Sampark (TB Helpline): **1800-11-6666**