

Childhood TB

World Vision
India



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presented at the Childhood
TB subgroup
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Achievements

- 1 . World Vision's **SHIFA-INDIA Tuberculosis Control and Prevention programme** supported the Revised National Tuberculosis Control Programme (RNTCP) of the Government of India in eight districts of Andhra Pradesh at district and sub-district levels.

Through this programme, World Vision **contributed** to the cure of over 30,000 tuberculosis (TB) patients in the State over the project period (**over 3000-3600 children Approx**)

Achievements*

- Extensively mobilised the community in eight districts
- Provided additional support to DOTS in 18 TUs identified as 'difficult' by the RNTCP increasing community ownership
- Catalysed the formation of more than 1000 loosely knit 'TB Care Groups' with memberships ranging from 8-15 that are spread out across eight districts (self-motivated women# taking lead mostly)
- Sustainability – merging them into a network of existing registered community based organisations (CBOs) working with microfinance and women's development

**From the Evaluation report*

with women in the lead, Childhood TB suspected cases became easier but a challenge here - as our role was more in referrals of suspects we had to accept the MoH figures of 10 -12 % as childhood tb cases

More achievements*

- Created a large and dedicated cadre (> 9000) of trained community based DOT Volunteers some of whom are cured TB patients
- Increased community awareness as part of efforts to decrease stigma and discrimination against TB
- Reached remote areas and marginalised populations such as fisherman and tribal communities to increase access to TB services
- Provided some infrastructure and logistics support to the RNTCP, when appropriate
- Supported the expansion of the RNTCP and linked unqualified health care providers to TB

**From the Evaluation report*

A key intervention adopted “social and child mobilization”

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The TB CARE Groups:
Involving Civil Society in
Combating TB by
organizing communities
& facilitating the creation
of TB Care groups within
the communities

#Addressing Childhood TB begins with adult sensitisation and mobilization of society

2. NGO TB Consortium formed

- A civil society initiative , first of its kind
- Work **within** the framework of RNTCP complementing it ,without reinventing wheels
- Scale up coordinated efforts to reduce TB burden
- Draw on each other's strengths by sharing field experiences in TB control
- Focus on ACSM to improve community TB awareness
- Work to enhance reach of DOTS
- Advocate evidence based initiatives
- Involve ourselves in Operations research
- This led to our getting into an USAID TB project and then the GF R9 project (latter one current along with another Civil society PR)

3. The TB ACSM- “kick start” project (USAID supported)*

- A key strength that was evident from discussions with NGO managers was the relatively smooth transition afforded by the “Kick-Start” grant to the GF R9 project that we transitioned into.
- Project targets (process indicators) on the whole were achieved with a general move toward the measurement of impact indicators at a National and State level evident in latest research developments.
- By now International and National NGOs with the emergence of civil society in TB care and control became more evident.
- The increasing Government ownership of the NGO support also became evident with good relationships developed based on mutually agreed objectives and performance outcomes.
- One of the greatest strengths – NGOs able to constitute a strong link between community and health providers in terms of their geographic reach, to fill important gaps such as defaulter tracing and case referrals, which not able to be adequately addressed by RNTCP.

* From The Evaluation Report

4. A WV India project in a tribal area

WV India TB Project in Andhra Pradesh in a TRIBAL AREA				
	Male	Female	Total	Percentage
# Adult TB Cases	1565	745	2310	100
Child Details	Boys	Girls	Total	
# Total Child TB Cases	110	85	195	8.44 of all TB cases
# NSPs	30	31	61	31.28*
# NSNs	56	22	78	40*
# EPs	24	32	56	28.72*
# Lymphnodes	17	29	46	82.146**
# Meningitis	5	1	6	10.71**
# Abdominal TB	2	0	2	3.57**
# Spinal TB	0	2	2	3.57**
* Percentage of total child TB cases				
** Percentage of the EP cases				

Cervical Lymphadenitis



5. A brief on GF R9 experience

Project Objectives:

- To improve the reach, visibility and effectiveness of RNTCP through Civil Society support in 74 districts
- To engage communities and community based care providers in 74 districts across 7 states to improve TB care & control, especially for marginalized and vulnerable populations including TB-HIV patients

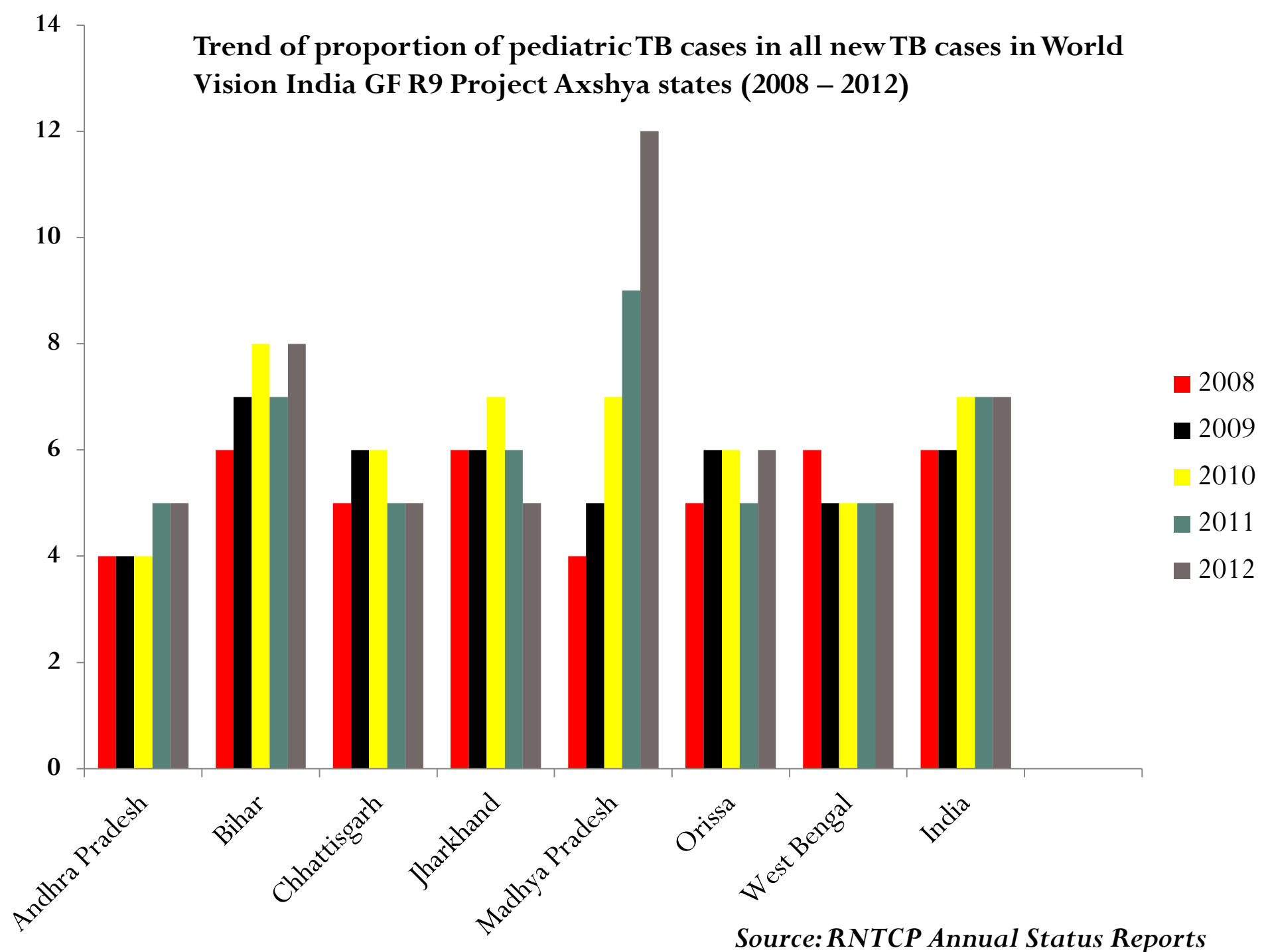
Project Universe:

- 7 states, 74 districts, 207 TUs, 493 blocks, 14137 *panchayets*, 48978 villages, 123 municipal corporation & wards in West Bengal, and 14 slums in Andhra Pradesh.
- Estimated population in the project universe: 79.6 million.

Key Interventions:

- Engage and empower local grass-root level CBOs and community care givers in TB control and care
- Link them with Revised National TB Control Program (RNTCP) of India through advocacy, capacity building and mobilization
- Strengthen health system

Trend of proportion of pediatric TB cases in all new TB cases in World Vision India GF R9 Project Axshya states (2008 – 2012)



Source: RNTCP Annual Status Reports

School sensitization

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Children speaking – from World Vision’s GF R9 Axshya project

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India

“When children talk people listen”



I have referred three people for sputum examination to the centre. I am so proud that I am able to serve my community.

← Basant Kumar Sahu a 14 year old one of the active participants of the school sensitization programs.

TB is a deadly disease. I have referred four TB suspects to the microscopy centre of which two were found to be suffering from TB. Both the people are now put on DOTS.

Sakshi



“Save them young”



- “There is a lot of misconception about TB in my village. I tell everyone that TB can only be cured with 6 months of complete treatment”.

-Rambati now cured of TB from Chhattishgarh.

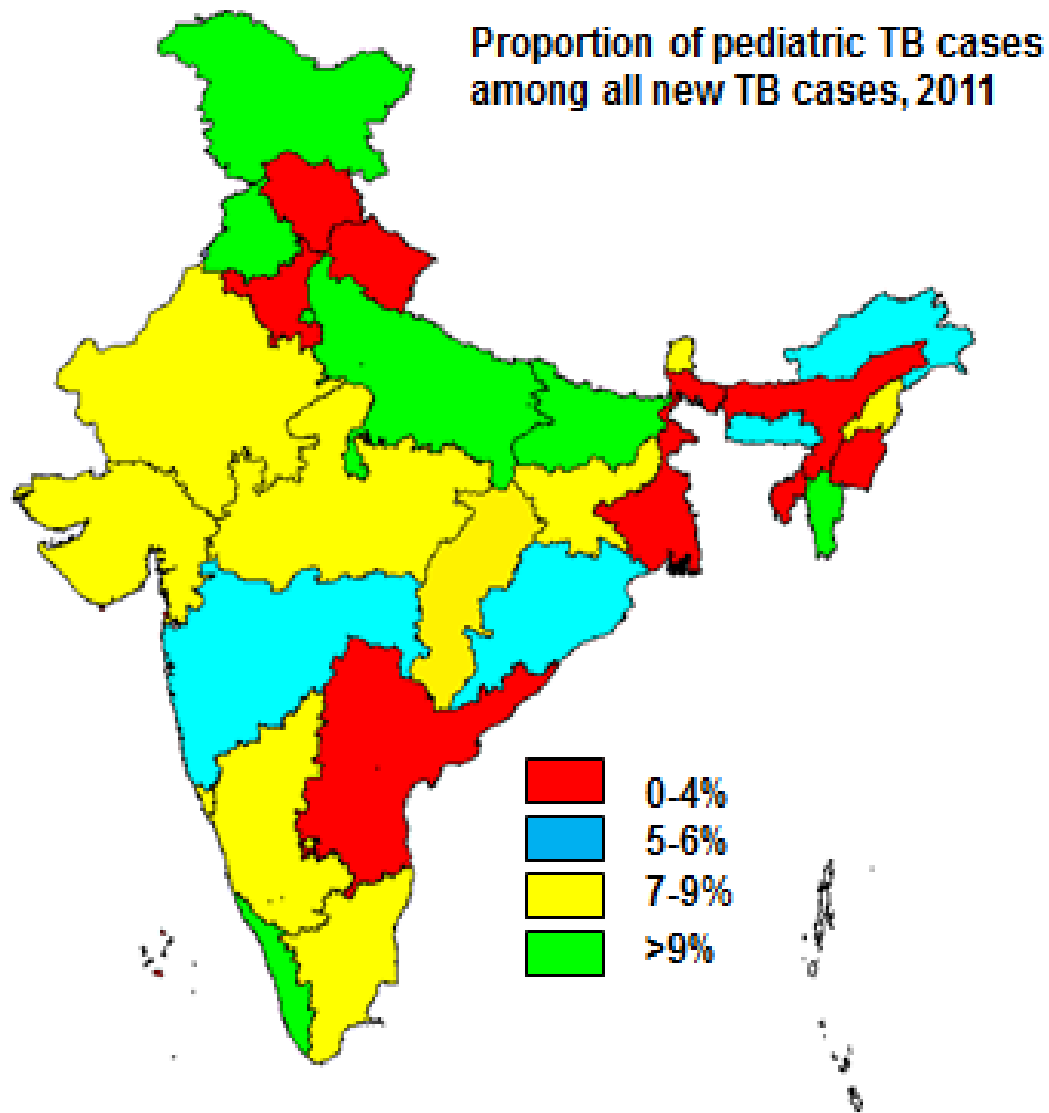
(from World Vision’s GF R9 Axshya project)

“Individual care counts”



- Rohit was identified as a initial defaulter by the World Vision’s GF R9 Axshya staff.
- Immediately the staff visited Rohit’s family but they were more convinced that they would get better treatment from the “Ojha” (the traditional village healer)
- After a lot of counseling along with his family he was put on DOT
- Today Rohit is regularly taking medicines at the village DOT centre through the Health Worker (ASHA)

Some India statistics/studies



Pediatric TB cases registered in India 2011

Type of case	No. of Pediatric cases	No. of Total TB cases	Proportion of pediatric TB
NSP	12981	642321	2%
NSN	36673	340203	11%
NEP	34026	226965	15%
New Others	384	1952	20%
Relapse	1024	112508	1%
Treatment after failure	249	17304	1%
Treatment after default	453	72787	1%
Retreatment others	2563	101832	3%
Total New cases	84064	1211441	7%
Total Retreatment cases	4289	304431	1%
Total TB cases	88353	1515872	6%

Patterns of Childhood TB seen in India

Date	Place	No. of cases studied	Type of cases identified	Cited
October 2010 to March 2012	Srinagar Garhwal, Uttarakhand	258	58 EP out of which lymph node 41.3% TB meningitis 22.4% pleural effusion 13.7%, musculoskeletal 12% abdominal 5.2 %, disseminated 3.4% cutaneous 1.7%). Cervical was the most common lymph node involved 70.8%.	Indian Journal of Community Health. Vol 25, No 1 (2013).
NA	Ahmedabad	382	EP 54.2% Out of EP Lymph nodes 43%. Abdomen 16.9%, Pleura 9.2%) Meninges 4.4% Joints 4.4%, Spine 4.4% and Skin 2.9%	National Journal of Community Medicine Vol 3 No 1 (2012)

Passive smoking, indoor air pollution and childhood tuberculosis: a case control study

A total of 200 cases and 200 controls were recruited in the study period. The factors which were significantly associated with development of tuberculosis were

1. Education of the mother, (OR 1.411, 95% CI 0.888-2.243, $p=0.001$)
2. Family member having tuberculosis in the last two years and residing in the same house (OR 2.797, 95% CI 1.353-5.789; $p=0.004$)
3. Being a passive smoker (OR 1.725, 95% CI 1.142-2.605; $p=0.009$).
4. No association between biomass cooking fuel use and development of tuberculosis was found.

-Indian J Tuberc. 2012 Jul;59(3):151-5.

Contact screening- studies in contrast

- A study on 848 NSP cases in Krishna district, 116 contacts were screened. 97 (84%) were on IPT out of which 83 (85.5%) children were consuming Isoniazid tablets regularly

(Pothukuchi M et al PLoS ONE 6(7): e22500. i:10.1371/journal.pone.0022500, 2011)

A cross-sectional study in four randomly selected urban and rural TUs in Tamil Nadu, India among 253 PTB patients revealed that of 220 contacts aged <14 years, only 31 (14%) had been screened for TB, and that of 84 household children aged <6 years, only 16 (19%) had been initiated on IPT.

(IntJ Tuber Lung Dis 2009 Dec;13(12):1507-12)

This is just to highlight two studies showing that practice of contact screening and IPT vary in different contexts.

But training and reinforcement can make a difference

- Two studies in South India showed very low uptake (14% identified) of screening and chemoprophylaxis (19%, <6yrs age put on IPT) and no follow-up on DOTS
- In a phase II, all MOs and Health staff were provided training and separate preventive therapy register and card according to WHO guidelines
- The results were dramatic 82% of child contacts identified, 61% of children < 6 years put on IPT out of which 74% completed treatment

Study done by TRC (currently NIRT) Chennai, India

Way forward...*

What could be critical to success:

- Multi sectoral involvement (MCHN, HIV, PP, CS etc)
- School health screening for TB
- Intentional involvement of children
- Strong Political will- Advocacy
- Intensify case finding efforts to detect and treat children with TB, particularly among vulnerable groups like household contacts, CLHIV etc.
- The large public sector available should be optimally utilized

these address the **challenges too*

Way forward... (2)

- Involvement and customised training of paediatricians
- Involvement of the medical schools
- Establish referral linkage systems from periphery to secondary or tertiary care hospitals for diagnosis of paediatric TB suspects
- Research in various aspects of childhood TB
- Effective strategy to disseminate and implement pediatric TB guidelines among pediatricians working in both public and private sector.
- Customized training modules that suit the training needs of the paediatricians be developed and a mechanism to effectively disseminate, sensitise and train the paediatricians be built into the system

Way forward... (3)

- Large public sector available be optimally utilized
- NTP effectively build capacity of Medical Officers at PHI level for diagnosis of paediatric TB.
- Sensitisation of communities, and involve them in identifying suspects among children and facilitating care seeking among them.
- Involvement of families/individuals who have actually had Tuberculosis may be useful.
- Effective strategy to disseminate and implement pediatric TB guidelines among pediatricians working in both public and private sector is needed.
- Adequately sensitise and train paediatricians in quality diagnosis and TB treatment especially in private sector

Way forward... (4)

- Mechanisms be developed to involve the MCH and immunization activities for suspect identification and early referral (Multi sectoral convergence)
 - Immense opportunity available within the existing health systems with other health departments working on child population like Maternal and Child health, IMNCI, ICDS, Polio programme, etc.
- Diagnostic and treatment capacities for children with tuberculosis be strengthened and standardised at all levels and across all sectors.
 - Establish referral linkage systems from periphery to secondary or tertiary care hospitals for diagnosis of paediatric TB suspects.
 - Engage with a pool of trained/ programme accredited paediatricians and radiologists in private sector to deliver diagnostic and treatment services at districts.
 - Utilization of the NTP validated approved newer technologies especially among Extra-pulmonary TB suspects and HIV co-infected TB suspects among children.

Way forward... (5)

- NTP to develop exclusive ACSM packages targeting paediatric population
 - There is a need for sensitisation of communities, and involve them in identifying suspects among children and facilitating care seeking among them. Involvement of families/individuals who have actually had Tuberculosis may be useful.
- Child friendly regimens with decreased pill burden and dispersible tablets
- Evaluate home based DOT for children with parents as DOT providers
- Close monitoring of paediatric TB patients and facilities to be developed for providing support and care during adverse events
- Implementation of Isoniazid Preventive Therapy for children needs strengthening to increase its coverage and completeness.

Way forward... (6)*

➤ **Drug-resistant TB:**

- Newer Paediatric definition for MDR-TB and guidelines to manage Pediatric contacts of DRTB
- Inclusion of Paediatricians in the programme management of DR TB committee at District and State level

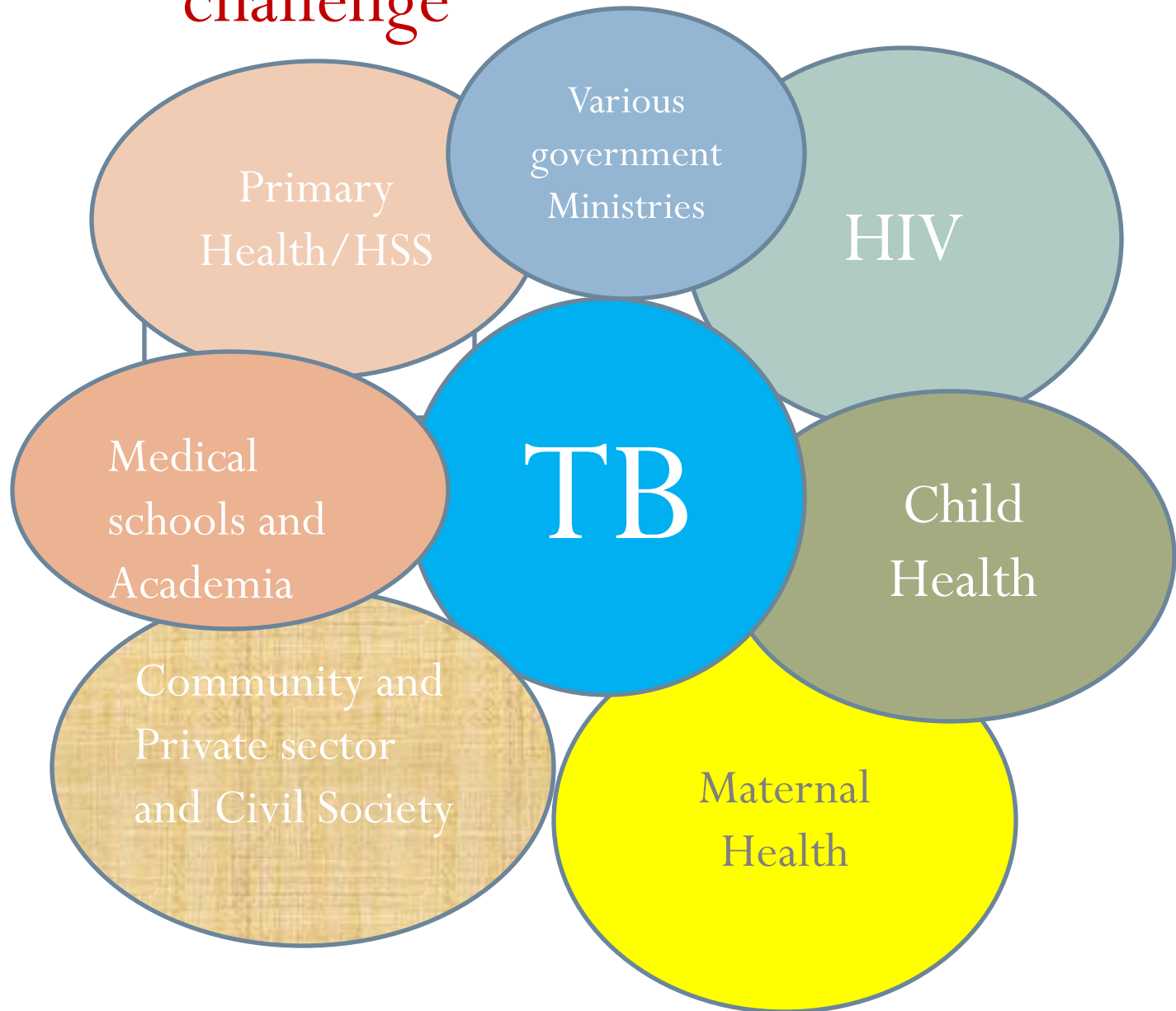
➤ **Research**

- Management of children with suspected/ diagnosed DRTB be strengthened . Assess the burden of DRTB by including children in future DRTB surveys
 - Develop mechanisms to involve child care institutions
 - Identify, support and develop centers of excellence for research in pediatric tuberculosis.
 - Newer diagnostics and treatment being tested or incorporated for NTP should include children

**Way forward slides 4 to 6- Courtesy: Adapted and abbreviated from Joint Monitoring Mission, 2011.*

Inter sectoral Coordination – a challenge

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Proposed OR Study on School TB for Phase 2 of GF R9 Project Axshya , World Vision India



Key OR question: What are the effective interventions to improve KAP of the students and teachers of the schools and healthcare providers and authorities of school health programs at the district level on TB & RNTCP?

OR Objectives:

1. To ascertain baseline KAP of the students and teachers of the schools and healthcare providers and authorities of school health programs at the district level on TB & RNTCP
2. To test specific interventions to improve TB related KAP in schools
3. To assess the changes in KAP of the students and teachers of the schools and healthcare providers and authorities of school health programs at the district level
4. To document and disseminate the experiences and learning of the OR with the RNTCP

Expected outcome:

Increase in knowledge on TB among school children and teachers

Increase in engagement of the schools in creating TB awareness in the community and households (**child TB in focus**)

Increase in collaboration between District TB Centres and district Education Dept.

Target Audience

645 schools in 7 selected districts of 7 states(middle and high school)

1 teacher and 1 student from each school will be selected as TB point persons. They will be sensitized by the project on TB and RNTCP and will be responsible for TB awareness in the schools. The DTO will work in close collaboration with DEO and NRHM School TB Coordinator.



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