Meeting on the Development of Childhood Tuberculosis Action Plans in the Western Pacific Region

26–28 March 2014
Ho Chi Minh, Viet Nam
REPORT

MEETING ON THE DEVELOPMENT OF CHILDHOOD TUBERCULOSIS
ACTION PLANS IN THE WESTERN PACIFIC REGION

Convened by:

WORLD HEALTH ORGANIZATION
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NOTE

The views expressed in this report are those of the participants of the Meeting on the Development of Child Tuberculosis Action Plans in the Western Pacific Region and do not necessarily reflect the policies of the Organization.

Keywords:

| Child welfare / Tuberculosis - prevention and control / |

This report has been printed by the World Health Organization Regional Office for the Western Pacific for governments of Member States in the Region and for those who participated in the Meeting on the Development of Child Tuberculosis Action Plans in the Western Pacific Region, which was held in Ho Chi Minh, Viet Nam from 26 to 28 March 2014.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>CDC</td>
<td>(US) Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CI</td>
<td>confidence interval</td>
</tr>
<tr>
<td>DOTS</td>
<td>directly observed treatment, short-course</td>
</tr>
<tr>
<td>DR</td>
<td>drug-resistant</td>
</tr>
<tr>
<td>E</td>
<td>ethambutol</td>
</tr>
<tr>
<td>EENC</td>
<td>early essential newborn care</td>
</tr>
<tr>
<td>EPI</td>
<td>Expanded Programme on Immunization</td>
</tr>
<tr>
<td>EPTB</td>
<td>extrapulmonary tuberculosis</td>
</tr>
<tr>
<td>Global Fund</td>
<td>Global Fund to Fight AIDS, Tuberculosis and Malaria</td>
</tr>
<tr>
<td>H</td>
<td>isoniazid</td>
</tr>
<tr>
<td>HRITF</td>
<td>(World Bank) Health Results Innovation Trust Fund</td>
</tr>
<tr>
<td>IC</td>
<td>infection control</td>
</tr>
<tr>
<td>IMCI</td>
<td>Integrated Management of Childhood Illness</td>
</tr>
<tr>
<td>IPT</td>
<td>isoniazid preventive treatment</td>
</tr>
<tr>
<td>MCH</td>
<td>maternal and child health</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
</tr>
<tr>
<td>MDR</td>
<td>multidrug-resistant</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>monitoring and evaluation</td>
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<tr>
<td>NTP</td>
<td>national tuberculosis programme</td>
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<tr>
<td>PTB</td>
<td>pulmonary tuberculosis</td>
</tr>
<tr>
<td>R</td>
<td>rifampicin</td>
</tr>
<tr>
<td>RMNCH</td>
<td>Reproductive, Maternal, Neonatal and Child Health</td>
</tr>
<tr>
<td>SOP</td>
<td>standard operating procedure</td>
</tr>
<tr>
<td>TAG</td>
<td>Treatment Action Group</td>
</tr>
<tr>
<td>TB</td>
<td>tuberculosis</td>
</tr>
<tr>
<td>The Union</td>
<td>International Union Against Tuberculosis and Lung Disease</td>
</tr>
<tr>
<td>TST</td>
<td>tuberculin skin test</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>Z</td>
<td>pyrazinamide</td>
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</table>
SUMMARY

Tuberculosis remains a serious health problem. There are 1.6 million new cases diagnosed each year in the Western Pacific Region with 110,000 TB-related deaths. Among the significant challenges are widespread tuberculosis among vulnerable and marginalized populations, including children.

The number of children affected by TB is not fully known. The World Health Organization (WHO) estimates that globally up to 74,000 children each year die from TB – a preventable and curable disease. Over half a million children fall ill with TB each year. After decades of being relegated to the shadows, the childhood TB epidemic is now in the spotlight. The goal of zero TB deaths in children has been endorsed by the international TB community and has united key stakeholders to make this goal a reality.

Childhood TB can only be effectively addressed with collaboration across the health system and community. To meet the goal of zero TB deaths, it is critical that childhood TB is prioritized in national health strategies, plans and budgets.

The Meeting on the Development of Child Tuberculosis Action Plans in the Western Pacific Region was held in Ho Chi Minh, Viet Nam, from 26 to 28 March 2014. The objectives of the meeting were:

1) to share country experiences, lessons learnt and best practices;
2) to establish priorities and design activities for strengthening childhood TB initiatives in the Western Pacific Region; and
3) to form a task force to oversee the activities and progress.
The meeting was attended by 21 country participants from 8 countries (Cambodia, China, Fiji, Lao People’s Democratic Republic, Mongolia, Papua New Guinea, the Philippines and Viet Nam). Each country team was composed of a focal point from the national tuberculosis control programme, the maternal and child health programme and the paediatric association. Also 17 observers and two temporary advisers participated the meeting from different technical agencies.

The meeting established priorities for strengthening childhood TB activities in the Region. Participants brought their experience, challenges and enthusiasm to develop priorities for the draft regional action plan. The meeting identified seven priority objectives for the Region:

1) Improved political commitment and collaboration with different stakeholders (technical programmes like maternal and child health, expanded programme on immunization; technical partners like UNICEF, World Vision and professional associations like paediatric associations, private providers).

2) Improved case detection (contact screening, diagnostic algorithm, use of Xpert).

3) Improved case management and logistical management (clinical management, drug supply, social support).

4) Improved prevention (vaccine, isoniazid preventive therapy (IPT), infection control (IC)).

5) Improved recording, reporting and data analysis (including hospital and private sector).

6) Improved awareness of community and capacity-building of health workers.

7) Operational research.

The meeting participants then developed a list of inputs and outputs to achieve the priority objectives. Then each country drafted their country specific action plan.

Participants of the meeting formed an informal taskforce called 'The Regional Childhood TB Taskforce' on the development of child tuberculosis action plans in the Western Pacific Region to support members to finalise national action plans and convene a regional workshop in collaboration with partners.
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<td>ANNEX 2</td>
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1. INTRODUCTION

The tuberculosis (TB) prevalence rate in the Western Pacific has dropped significantly since 1990, and the Region as a whole is on track to meet its targets for the successful treatment of the disease. Nevertheless, tuberculosis remains a serious health problem. There are 1.6 million new cases diagnosed each year in the Region with 110 000 TB-related deaths. Among the significant challenges are widespread tuberculosis among vulnerable and marginalized populations, such as children, the elderly, migrants and the poor; underfunding of TB control programmes; and multidrug-resistant TB.

The goal of a world with zero TB deaths in children has been endorsed by the international TB community and has brought stakeholders together to make this goal a reality. The global TB leaders including the World Health Organization (WHO), the International Union Against Tuberculosis and Lung Disease (The Union), Stop TB Partnership, UNICEF, U.S. Centers for Disease Control and Prevention (CDC), United States Agency for International Development (USAID) and Treatment Action Group (TAG) launched a road map for childhood tuberculosis towards zero deaths on October 2013 and outlined 10 key actions to be taken at global, regional and national levels.

The full scope of the problem of TB in children is not fully known. World Health Organization (WHO) estimates that globally up to 74 000 children each year die from TB – a preventable and curable disease. Over half a million children fall ill with TB each year. TB in children is often missed or overlooked due to non-specific symptoms and difficulties in diagnosis. This has made it difficult to assess the actual magnitude of the childhood TB epidemic. There is an urgent need for attention, prioritization and commitment for childhood TB.

Childhood TB can only be effectively addressed with collaboration across the health system and community. There is an urgent need for greater awareness of, and increased screening for TB in children, particularly that serves children in settings with high prevalence of TB and HIV. Children who are malnourished or living with HIV should be checked for TB signs and symptoms. Coordination and integration of maternal and child health services, HIV care and TB care into a seamless package needs to be planned. Health workers in both the public and private sectors should report to national TB programmes all children diagnosed with TB, so that acceptable follow up can be ensured. Supportive environments including availability of diagnostic facilities, paediatric TB drugs, and trained health workers need to be ensured.

To meet the goal of zero TB deaths, prioritization of childhood TB is critical in national health strategies, plans and budgets. The road map needs to be translated into concrete action plan at the regional and national level. High TB burden countries in the Western Pacific Region (Cambodia, China, the Lao People's Democratic Republic, Mongolia, Papua New Guinea, the Philippines and Viet Nam) are in different stages of implementation of childhood TB related activities. Therefore, the first meeting of the childhood TB for the Western Pacific Region was held from 26 to 28 March 2014 with financial support from the Government of Japan.
1.1 Objectives

The objectives of the meeting were:

1) to share country experiences, lessons learnt and best practices;

2) to establish priorities and design activities for strengthening childhood TB initiatives in the Western Pacific Region; and

3) to form a task force to oversee the activities and progress.

1.2 Temporary advisers, resource people, observers and secretariat

The temporary advisers were Professor Steve Graham, Centre for International Child Health, University of Melbourne (Australia), Associate Professor Ben Marais, Sydney Institute for Emerging Infectious Diseases and Biosecurity, University of Sydney (Australia).

The observers included representatives from Beijing Childrens Hospital, China; KNCV Tuberculosis Foundation, The Netherlands (KNCV), The International UNION Against Tuberculosis and Lung Disease, The University of Melbourne, World Vision International; Global Fund; Global Alliance for TB Drug Development; Sentinel Project.

The secretariat was composed of representatives from WHO Regional Office of the Western Pacific, and WHO country offices (China, the Philippines and Viet Nam).

1.3 Participants

The target audience for this consultation were: (1) the national TB programme (NTP) managers - the focal person of childhood TB of NTP; (2) paediatric association representatives; (3) focal point for maternal and child health programme from eight countries in the Region (Cambodia, China, Fiji, Lao People's Democratic Republic, Mongolia, Papua New Guinea, the Philippines, and Viet Nam). The full list of participants is available at Annex 2.

1.4 Methodology of the consultation

During the three-day meeting plenary presentations were hold on (i) child TB policies and developments (ii) global, regional and national disease burden and epidemiology and (iii) programme management and evaluation. ‘Break-out group’ sessions were also held where participants (i) develop priorities and (ii) draft national action plans.

2. PROCEEDINGS

2.1 Opening

Dr Katsunori Osuga, Medical Officer, Stop TB and Leprosy Elimination, WHO, Western Pacific Regional Office (WPRO) opened the consultation on behalf of Dr Shin Young-soo, WHO Regional Director for the Western Pacific. Dr Osuga welcomed participants and congratulated Member States of the Region on meeting the Millennium Development Goal
targets. With the global spotlight on childhood TB, Dr Osuga highlighted the importance of prioritizing childhood TB in regional and national plans.

2.1 Workshop expectations, objectives, agenda, norms and logistics

In outlining the objectives of the meeting Dr Tauhid Islam, Medical Officer, WHO, Western Pacific Regional Office, suggested that it was an opportunity to share country experiences from national programmes and challenges for child TB. The meeting would translate the Roadmap for Childhood Tuberculosis: towards zero deaths into national priorities and action plans.

Dr Islam acknowledged the maternal and child health, paediatric associations and other partners and suggested that they have a critical role to play in overcoming the barriers.

2.2 Plenary presentations

2.2.1 Child TB Disease Burden (Global and WPRO)

Dr Katsunori Osuga described the global child TB burden. From global case notifications annual incidence of childhood TB is estimated at 349,000. However, deterministic models estimate incidence at 530,000 (95% CI 510,000 - 550,000); and a recent analysis estimates higher incidence at 999,792 (95% CI 937,877 - 1,055,414) and MDR-TB at 31,948 (95% CI 25,594 - 38,663).

Dr Katsunori Osuga presented few case studies to illustrate different trends across the Western Pacific Region. He summarized that the burden of Child TB in this Region is unknown, but estimates suggest that the burden is significantly high. Children are exposed to TB bacilli in household and health facilities. Guidelines exist in many countries, but not fully implemented. Weak linkage between NTP and paediatrician also poses a major challenge.

2.2.2 Child health: overview of the Western Pacific Region

Dr Thi Bang Hoang, National Professional Officer, Maternal Child Health and Nutrition Unit, WHO Viet Nam presented the child health overview of the Region. During the past two decades in the Western Pacific Region, under-five mortality has been reduced dramatically. However, in 2013, there are 415,700 of under-five deaths, 96% of these deaths are in six countries including China (62%), the Philippines (17%), Viet Nam (8%), Cambodia (3%), Lao People's Democratic Republic (3%), Papua New Guinea (3%) and other remaining countries (4%). More than half of deaths of under-five deaths are neonatal deaths, followed by pneumonia, non-communicable disease, injuries and diarrhoea.

Dr Hoang outlined the key challenges for maternal and child health (MCH) in the Western Pacific Region, including: inequity; maternal nutrition and antenatal care; management of complications and early essential newborn care interventions; quality of MCH services; and addressing adolescent health. Dr Hoang summarized regional policy to address these challenges, including the action plan for healthy newborn infants in the Western Pacific Region for 2014-2020 calls for scaling-up the early essential newborn care (EENC) and the action plan to reduce the double burden of malnutrition in the Western Pacific Region (2015–2020).

2.2.3 Child TB Disease Risk and Spectrum

Associate Professor Ben Marais (temporary advisor) presented the risk and spectrum of child TB. TB is a common, but unrecognized, cause of death in children from TB endemic
countries. He suggested that we can make assumptions about what to expect in national TB programme (NTP) data based on disease risk and spectrum: the burden of childhood TB in endemic settings should reflect high risk of disease in children (8-12% of total cases); younger children are at the highest risk of developing TB disease; cases should be spread geographically; and a diversity of pulmonary and extrapulmonary TB should be reflected in NTP data.

2.2.4 Roadmap for Childhood Tuberculosis

Professor Steve Graham, University of Melbourne and the Union and Chair, Child Sub-Group, Stop TB Partnership, highlighted the need to move from guidelines to implementation. The Roadmap for Childhood Tuberculosis: towards zero deaths, identifies key actions that must be taken:

- Include the needs of children and adolescents in research, policy development and clinical practices.
- Collect and report better data, including data on prevention.
- Develop policy guidance, training and reference materials. The second edition of the WHO Guidance for national tuberculosis programmes on the management of tuberculosis in children was approved in March 2014, national guidelines across the region, and tools to assist with implementation.
- Foster local expertise and leadership.
- Use critical opportunities for intervention.
- Engage key stakeholders; and develop integrated family-centred and community-centred strategies.
- Develop integrated family-centred and community-centred strategies.
- Address research gaps. WHO Stop TB Partnership has identified priorities in operational research to improve tuberculosis care and control, including improve diagnostics, improve treatment, contact screening and IPT.
- Meet funding needs for child TB, which have been estimated at $80 million globally.
- Form coalitions and partnerships to improve tools for diagnosis and treatment.

2.2.5 Practical Issues at Country Level

Professor Graham outlined some practical issues at the country level including lack of political will, lack of understanding of child TB epidemiology, challenge in diagnosis, contact screening, case management, implementing preventive therapy and logistical issues such as child friendly drug formulation and dosage.

He gave an example of a family and community-based approach including contact screening and symptom-based screening that has been successfully piloted in Viet Nam. Four provinces (35 districts and 611 community health centres) implemented contact screening and IPT. The programme screened 4109 child contacts, of which 345 children were diagnosed with TB and 1577 were eligible for IPT. Most of the issues faced in implementing a family and
community-based approach can be addressed through training and/or operational research, including: improving understanding of child TB epidemiology and the rationale for implementing contact screening and IPT, improving confidence in diagnosis using symptom-based screening and referral, and addressing NTP management issues that differ for children (from adults) including classification of cases and drug dosages.

2.2.6 Policy: Management Principles


Following points were emphasized:

**Diagnostic:** The major clinical challenge in addressing child TB is diagnostic. Tuberculin skin test (TST) and culture are often unavailable but that in the majority of cases neither is required for a decision to treat. Particular diagnostic challenges include younger children, acute severe pneumonia, HIV-infection, malnourished and MDR-TB. Health workers are often not confident to make symptom-based diagnoses.

Available guidance makes no recommendation on scoring systems.

Xpert MTB/RIF may be used rather than conventional microscopy and culture as the initial test in all children suspected of having TB considering high specificity and sensitivity.

**Treatment:** The recent guidance contains a broader Isoniazid range (7-15 mg/kg).

**Prevention:** Contact screening is important to prevent TB-related morbidity and mortality in children and HIV-infected individuals and provides an opportunity to increase case-finding and earlier treatment of undiagnosed active TB cases. Contact screening is effective in children because of the high risk of infection; meta-analysis found that 10% of child contacts <5 years had TB disease, in comparison to 3% of all contacts. IPT reduces the risk of TB disease by around 60% among infected contacts of all ages. Large observational studies suggest that the efficacy may be higher (80-90%) in child contacts.

**Implementation and management** by NTP: TB prevention, diagnosis and treatment should be integrated into family planning, maternal and child health services. TB and HIV programmes should also disaggregate data by sex and age.

2.2.7 Implementation and enabling environment

Associate Professor Ben Marais suggested that the collaboration needs to be strengthened among NTP, paediatricians, health facilities (infection control), HIV, EPI and MCH programmes. Children will present at the primary care level, integration with MCH programmes should be improved to support case finding. Integrated management of childhood illness (IMCI) should consider including the question on TB contact in the past 12 months.

Monitoring and evaluation should capture diagnosis and treatment gaps to inform the NTP activities. The standard register focuses on PTB/EPTB to monitor infectious adults, however, more detail is needed for children to capture the disease spectrum.
2.2.8 Towards Zero Deaths

Dr Kyi Minn outlined World Vision International’s approach to child TB through community-based case detection, case management (DOTS), prevention, local advocacy and intersectoral collaboration. World Vision addresses the gap of child TB through (1) policy and practices, (2) integration and implementations, (3) communication and collaboration, (4) knowledge and Practices.

2.2.9 Child TB: Global Fund Viewpoint

Dr Viviana Mangiaterra, the Global Fund, presented the topic 'Ending TB deaths in children: maximizing impact of GF investments in Reproductive, Maternal, Neonatal and Child Health (RMNCH) and Health Systems'. The Global Fund Strategy 2012-2016 calls for maximizing the impact of Global Fund investments on health system strengthening and improving the health of mothers and children. TB is increasingly recognised as an important cause or co-morbidity in children with acute pneumonia, severe malnutrition, meningitis and HIV. Expansion/integration of HIV/TB services into Maternal and Child Health services could significantly improve overall survival of women and children. Integrated Management of Childhood Illness (IMCI) at first-level health facilities and antenatal care provides opportunities to further TB detection and treatment. Antenatal care is an opportunity for TB screening and treatment.

Global Fund is in process of partnering with UNICEF to improve availability of essential medicines and commodities; and the World Bank Health Results Innovation Trust Fund (HRITF), which supports Results Based Financing (RBF) approaches in the health sector for achievement of the health-related focus on MDGs 4&5. Global Fund will support operational research where it is part of a country proposal and national strategy.

Dr Viviana Mangiaterra suggested that those considering Global Fund applications refer to the following documents: WHO technical guidance note: strengthening the inclusion of RMNCH in concept notes to the Global Fund, GF Information note on RMNCH and GF TB Strategic Investment guidance.

2.2.10 Child-friendly TB drugs

Dr Cherise Scott, Director, Pediatric Programs, TB Alliance outlined the issues for child-friendly TB drug development. There are no appropriately dosed TB medicines for children (adult dose are often cut or crushed to achieve desired dose), there are no dose recommendations for babies under five kilograms, and there is generally a gap of seven years or more projected between launch of adult treatments and availability of child formulations.

Global Alliance for TB Drug Development aims to increase access to pediatric TB medicines by collaborating with manufacturers to produce high quality HRZ, HR, and E in the correct dosages and formulations for children; and working with national programmes to improve data, planning and regulatory environment and funding for new pediatric medicines.

2.2.11 Paediatric Drug Resistant Tuberculosis

Dr Jennifer Furin, Director, Capacity Building, Sentinel Project introduced the topic on pediatric drug-resistant TB. As per the recent published article, estimated 33,000 incident DR-TB cases are among children per year and incidence of MDR-TB in children in the Western Pacific Region is 8349 (95% CI 5 639-11 610) each year.
She recommended a family-centered approach to DR-TB, including active contact tracing and family support, integrating with child health through training for providers; including older children in prevalence surveys; funding studies to better estimate prevalence of DR-TB in children; and the use of Gene Xpert MTB/RIF® as primary screening tool in children instead of smear microscopy. Dr Furin stressed the importance of beginning treatment in suspected cases of DR-TB where there is an adult contact with DR-TB.
## 2.3 Country poster presentations – status quo in each country

Countries presented their child TB disease burden, policies, practises and priorities through poster presentations. Country situations as per the poster are summarized below:

<table>
<thead>
<tr>
<th>Vietnam</th>
<th>Cambodia</th>
<th>China</th>
<th>Fiji</th>
<th>Laos PDR</th>
<th>Mongolia</th>
<th>Papua New Guinea</th>
<th>Philippines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease burden</td>
<td>High burden country</td>
<td>High burden country</td>
<td>High burden country</td>
<td>High burden country</td>
<td>High burden country</td>
<td>High burden country</td>
<td>High burden country</td>
</tr>
<tr>
<td></td>
<td>Disaggregated by age, geography, disease type: Age; province and district level.</td>
<td>Disaggregated by age, geography, disease type: Age</td>
<td>Disaggregated by age, geography, disease type: Age</td>
<td>Disaggregated by age, geography, disease type: Age</td>
<td>Disaggregated by age, geography, disease type: Age</td>
<td>Disaggregated by age, geography, disease type: Age</td>
<td>Disaggregated by age, geography, disease type: Age</td>
</tr>
<tr>
<td></td>
<td>High rate of chronic and complicated TB among older children diagnosed in pediatric hospital which suggests that more acute cases esp. children &lt;5 remain undetected.</td>
<td>PTB(+/-) or EPTB; Age</td>
<td>10% (2013). MDR-TB first child notified 2014.</td>
<td>National TB Guidelines includes contact screening and infection control for health care and community settings. Resources include: WHO Pocket Book of Hospital Care for Children: guidelines for the management of common illnesses with limited resources.</td>
<td>Algorithm</td>
<td>National Stop TB strategy 2010-2015: No specific programme focusing on childhood TB, however, plan to update.</td>
<td>Revised manual of procedures includes children.</td>
</tr>
<tr>
<td></td>
<td>Insufficient resources.</td>
<td>Insufficient resources.</td>
<td>Insufficient resources.</td>
<td>Insufficient resources.</td>
<td>Insufficient resources.</td>
<td>Global Fund, shortage of resources (human and financial).</td>
<td>AnaAID, Global Fund</td>
</tr>
<tr>
<td>Leadership</td>
<td>Establishing a Childhood TB Management Group under NTP.</td>
<td>NTP</td>
<td>NTP</td>
<td>NTP</td>
<td>NTP</td>
<td>NTP</td>
<td>NTP</td>
</tr>
</tbody>
</table>

### National Stop TB strategy 2010-2015: No specific programme focusing on childhood TB, however, plan to update.

- **Vietnam:** Establishing a Childhood TB Management Group under NTP.
- **Cambodia:** NTP
- **China:** NTP
- **Fiji:** NTP
- **Laos PDR:** NTP
- **Mongolia:** National TB Management protocol includes child TB. Management of TB is included in Paediatric guideline for management of common illnesses in children in PNG. A separate childhood TB guideline also exists for guidance for diagnosis and management of TB for all health workers.
- **Papua New Guinea:** Revised manual of procedures includes children.
- **Philippines:** MCH: Could be better integrated with IMCI, Paediatric associations: Philippine Pediatric Society and Phil. Ambulatory Pediatric Association. Hospitals and health centres: TB-DOTS provider NGOs: Philippine Coalition Against Tuberculosis (PhilCAT) Assist in the engagement of private physicians, professional groups and other private organizations. Private clinics: PhilCAT assist in the engagement of private physicians, professional groups and other private organizations.
<table>
<thead>
<tr>
<th>Prevention</th>
<th>BCG Coverage</th>
<th>Contact screening: A pilot of community-based contact screening in 4 districts will be scaled up to 2017. Data suggest 89% compliance and 8% cases found. Incentives for child health workers in diagnosis and treatment. <strong>IPT:</strong> Diagnostic algorithm. Managed at district level. Parental consent is an issue, need increasing IEC materials for the community.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BCG: Neonatal</td>
<td>Contact screening: Weak childhood TB prevention measures. <strong>IPT:</strong> not implemented.</td>
</tr>
<tr>
<td></td>
<td>BCG: 82% (2013)</td>
<td>Contact screening: National Mother and New Born Hospital (NMNH) contact screening. <strong>IPT:</strong> for household contacts ≤ 5 years.</td>
</tr>
<tr>
<td></td>
<td>BCG: ≤80%</td>
<td>Contact screening: Poor practice on symptom-based screening and preventive therapy for child contacts of tuberculosis patients. <strong>IPT:</strong> not routinely provided.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Diagnostic tests: Sputum smear and CXR available. Need improved training CXR for diagnosis and resources (out-date machinery). Considering digital CXR or GeneXpert.</th>
<th>Diagnostic tests: Routine TB diagnosis and treatment are available in 27 operational districts (OD) out of 62 OD. Suspect TB referred to hospitals for TST and CXR. CXR limited diagnostic capacity and resources (reagents, machine maintenance).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Diagnostic tests: GeneXpert.</td>
<td>Diagnostic tests: GeneXpert. CXR not widely available.</td>
</tr>
<tr>
<td></td>
<td>Diagnostic tests: Sputum smear, CXR.</td>
<td>Diagnostic tests: TST, CXR. <strong>Symptom-based screening:</strong> Yes</td>
</tr>
<tr>
<td></td>
<td>Diagnostic tests: Sputum smear microscopy, TST, CXR, Biopsy, GeneXpert (at National Children’s Hospital). CXR needs improved access, quality and reporting. <strong>Symptom-based screening:</strong> Diagnostic algorithm includes symptom-based screening.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management</th>
<th>Child-friendly medicines not available.</th>
<th>New regimen for TB treatment for childhood TB 2011 C-DOTS (USAID funding concluded)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No standard dosage of anti-TB drugs for children, medication is unreasonable.</td>
<td>C-DOTS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Training and education</th>
<th>IPC material distributed to communities. Training child TB management for NTP staff at provincial, district and community level, and for paediatricians. Training CXR reading provincial/district level. Inefficient focus on children at community level, need training IPT for HCW at community.</th>
<th>Referral hospital physicians and paediatricians trained on CXR reading and clinical management of child TB. Trained TB nurses on TST administration.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Currently training PTC, paediatricians at central, provincial and district levels. Supervision at all levels. IEC at community level.</td>
<td>NTP material for the community developed and distributed. Knowledge of TB and quality of care currently issues.</td>
</tr>
<tr>
<td></td>
<td>NTP provides ongoing training of health workers in clinical management of TB including childhood TB</td>
<td>Conducted by regional health offices Training during residency. Train all health staff to implement TB in children. Diagnosis (TST standard reader) and management of cases, including IPT, Interpretation of Chest x-rays and GIX.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Human resources</th>
<th>High staff turnover at district level, few paediatricians at district level.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>M&amp;E</th>
<th>Quarterly through the NTP at all levels. IPT included in M&amp;E.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quarterly through the NTP. Annual evaluation and Joint Program Review (2008 and 2012).</td>
</tr>
<tr>
<td></td>
<td>NTP, including IPT.</td>
</tr>
<tr>
<td></td>
<td>Quarterly through the NTP. Adapt to the use of new diagnostic algorithm. External review 2013.</td>
</tr>
<tr>
<td></td>
<td>Monthly and quarterly.</td>
</tr>
<tr>
<td></td>
<td>All confirmed TB cases registered and reported by TB clinic from each facility. There is no separate TB register or reporting for paediatric TB. Childhood TB morbidity and mortality also reported in annual report on child morbidity and mortality from the major public hospitals.</td>
</tr>
<tr>
<td></td>
<td>Quarterly and annual reports. Programme implementation reviews. Large number of reporting and recording forms.</td>
</tr>
<tr>
<td></td>
<td>Electronic system for TB implement in some districts (2014 implemented nation-wide).</td>
</tr>
<tr>
<td>Priorities identified</td>
<td>Activities</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1. Continuing the implementation of contact screening and IPT in new provinces</td>
<td>1. Investigate the capacity of childhood TB diagnosis and treatment. Organize the childhood</td>
</tr>
<tr>
<td>2. Strengthening the training of more staff in childhood TB management on the new</td>
<td>TB diagnosis and treatment. Organize the childhood TB diagnosis and treatment training course;</td>
</tr>
<tr>
<td>approach.</td>
<td>2. Strengthening early detection and treatment of infectious tuberculosis in whole population,</td>
</tr>
<tr>
<td>3. Providing new diagnostic means and techniques: digital CXR, GeneXpert, etc.</td>
<td>reduce the spread to children</td>
</tr>
<tr>
<td>4. Facilitating IEC for HCWs, TB patients and community on childhood TB prevention.</td>
<td>3. Improve children's TB control strategy</td>
</tr>
<tr>
<td>5. Providing more – friendly TB drugs for children in prevention therapy.</td>
<td>4. Expand children's tuberculosis free policy</td>
</tr>
<tr>
<td>6. Set up the Childhood TB Ward and Childhood TB Hospital under Provincial TB and</td>
<td>5. Strengthen the close contacts screening of tuberculosis in children</td>
</tr>
<tr>
<td>Lung Disease Hospitals.</td>
<td>6. Improve the diagnosis and treatment of tuberculosis in children</td>
</tr>
<tr>
<td>7. Introduce GeneXpert for childhood TB activity.</td>
<td>7. Strengthen clinical training of childhood TB, standardized diagnosis and treatment</td>
</tr>
<tr>
<td>8. Continue to monitor and supervise IPT intake and outcome.</td>
<td>8. Strengthen the cooperation between TB control institutions and children's hospitals,</td>
</tr>
<tr>
<td></td>
<td>tuberculosis hospitals, and jointly carry out childhood TB</td>
</tr>
<tr>
<td>treatment and management</td>
<td>10. Standardized TB treatment for children</td>
</tr>
<tr>
<td>12. Standardize the TB preventive therapy in Children</td>
<td>12. Standardize the TB preventive therapy in Children</td>
</tr>
<tr>
<td>1. Regional National Map for Childhood TB - Towards Zero deaths (2015 and beyond)</td>
<td>1. Investigate the capacity of childhood TB diagnosis and treatment. Organize the childhood</td>
</tr>
<tr>
<td>2. Strengthening Divisional/sub-divisional networks</td>
<td>TB diagnosis and treatment. Organize the childhood TB diagnosis and treatment training course;</td>
</tr>
<tr>
<td>3. Strengthened Screening of TB in children contacts &amp; use of isoniazid prophylaxis</td>
<td>2. Strengthening early detection and treatment of infectious tuberculosis in whole population,</td>
</tr>
<tr>
<td>4. Adopt Childhood TB roadmap</td>
<td>reduce the spread to children</td>
</tr>
<tr>
<td>5. Operation research opportunities</td>
<td>5. Improve children's TB control strategy</td>
</tr>
<tr>
<td>6. Improve referral system of TB contact children to referral hospitals by providing</td>
<td>6. Improve referral access to chest X-ray and Gene Xpert</td>
</tr>
<tr>
<td>transport fee support</td>
<td>7. Joint supervision by pediatric and TB unit</td>
</tr>
<tr>
<td>1. Expand childhood TB service including IPT to more ODs</td>
<td>10. Improve to internal between TB, pediatric unit and all stakeholders</td>
</tr>
<tr>
<td>2. Improve diagnosis capacity of TB physicians through providing more training/</td>
<td>11. Continue to monitor and supervise IPT intake and outcome</td>
</tr>
<tr>
<td>refresher and keep conducting regular on the job training at the fields.</td>
<td>12. Improve co-ordination and efficiency of different HRD activities within central NTP</td>
</tr>
<tr>
<td>3. Encourage health centers to perform TB contact tracing regularly.</td>
<td>(including definitions of HRD related tasks).</td>
</tr>
<tr>
<td>4. Provide health center staff with more training on IPT screening skill and on the</td>
<td>4. Assess staffing and training status on childhood TB through supportive supervision</td>
</tr>
<tr>
<td>job training at the fields.</td>
<td>5. Link Childhood TB program to MCH</td>
</tr>
<tr>
<td>5. Improve referral system of TB contact children to referral hospitals by providing</td>
<td>6. Integrate to pediatric preschool training program</td>
</tr>
<tr>
<td>transport fee support</td>
<td>7. Develop strategy to end mortality due to TB among children</td>
</tr>
<tr>
<td>6. Provide more x-ray films and reagents</td>
<td>8. Take action for resource mobilization to fight childhood TB</td>
</tr>
<tr>
<td>7. Introduce GeneXpert for childhood TB activity.</td>
<td>9. Strengthen coordination among technical programmes on training, supervision within the</td>
</tr>
<tr>
<td>8. Continue to monitor and supervise IPT intake and outcome.</td>
<td>childhood TB</td>
</tr>
<tr>
<td>9. Improve co-ordination and efficiency of different HRD activities within central NTP</td>
<td>10. Integrate with IMCI training for first level HCWs</td>
</tr>
<tr>
<td>10. Improvement of country TB control in general by NTP</td>
<td>11. Improve co-ordination and efficiency of different HRD activities within central NTP</td>
</tr>
<tr>
<td>11. Improve BCG uptake by the EPI program.</td>
<td>(including definitions of HRD related tasks).</td>
</tr>
<tr>
<td>12. Integrate with IMCI training for first level HCWs</td>
<td>2. Ensure implementation of IPT to child TB contact of infectious source case using symptom</td>
</tr>
<tr>
<td>13. Integrate with the Maternal, Newborn, Child Health and Nutrition Programs</td>
<td>base screening. This will be done through training and provision of circular instructions</td>
</tr>
<tr>
<td>14. Coordinate with professional group to improve quality of x-rays</td>
<td>on BCG uptake by the EPI program.</td>
</tr>
<tr>
<td>5. Conduct of research to improve diagnosis and treatment for TB in children</td>
<td>3. Ensure implementation of IPT to child TB contact of infectious source case using symptom</td>
</tr>
<tr>
<td>6. Improve co-ordination and efficiency of different HRD activities within central NTP</td>
<td>base screening. This will be done through training and provision of circular instructions</td>
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<tr>
<td>7. Improve BCG uptake by the EPI program.</td>
<td>on BCG uptake by the EPI program.</td>
</tr>
<tr>
<td>8. Integrate with IMCI training for first level HCWs</td>
<td>4. Develop strategy to end mortality due to TB among children</td>
</tr>
<tr>
<td>9. Link “Child Health Advisory Committee” to improve data collection and integration</td>
<td>5. Take action for resource mobilization to fight childhood TB</td>
</tr>
<tr>
<td>with other child health initiatives.</td>
<td>6. Integrate with IMCI training for first level HCWs</td>
</tr>
<tr>
<td>10. Improve co-ordination and efficiency of different HRD activities within central NTP</td>
<td>7. Link with “Child Health Advisory Committee” to improve data collection and integration</td>
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<td>with other child health initiatives.</td>
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<td>12. Integrate with IMCI training for first level HCWs</td>
<td>8. Conduct of research to improve diagnosis and treatment for TB in children</td>
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<tr>
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<tr>
<td>14. Coordinate with professional group to improve quality of x-rays</td>
<td>(including definitions of HRD related tasks).</td>
</tr>
<tr>
<td>5. Conduct of research to improve diagnosis and treatment for TB in children</td>
<td>10. Integrate with IMCI training for first level HCWs</td>
</tr>
</tbody>
</table>
2.4 Group work

2.4.1 Issues to action:

Participants were split into three groups. Each group identified major issues at the country level. In a plenary session, all three groups presented, discussed and translated issues into action. Seven priority areas were identified by the group:

1) Improved political commitment and collaboration with different stakeholders (technical programmes like maternal and child health, expanded programme on immunization; technical partners like UNICEF, World Vision and professional associations like paediatric associations, private providers).

2) Improved case detection (contact screening, diagnostic algorithm, use of Xpert).

3) Improved case management and logistical management (clinical management, drug supply, social support).

4) Improved prevention (vaccine, isoniazid preventive therapy (IPT), infection control (IC).

5) Improved recording, reporting and data analysis (including hospital and private sector).

6) Improved awareness of community and capacity building of health care worker.

7) Operational research.
2.4.2 Drafting Action Plan Framework

The meeting participants developed a list of inputs and outputs to achieve the priority objectives.

Framework

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Output</th>
<th>Activities</th>
<th>Indicators</th>
</tr>
</thead>
</table>
| 1. Improved political commitment, advocacy and collaboration with relevant stakeholders by 2016. | 1.1 Ministry of Health commits to child TB as a priority. | 1.1.1 Organizing sensitization meetings with stakeholders  
1.1.2 Development of child TB roadmap and action plan in line with national health plan  
1.1.3 Endorsement of the action plan  
1.1.4 Budget allocation as the action plan  
1.1.5 Establishment of a national steering committee | • Steering committee established and Terms of Reference developed.  
• TB indicator in MCH reporting. |
|                                                                           | 1.2 Improved collaboration with relevant stakeholders                  | 1.2.1 Establishment of an extended technical child TB working group with broad representation of MCH, HIV, EPI, paediatric association and other technical partners.  
1.2.2 Situation assessment, identification of gaps and priorities  
1.2.3. Joint advocacy plan  
1.2.4 Joint implementation plan development  
1.2.5. Inclusion of child TB in TB programme and health sector review | • Working group established and Terms of Reference developed. |
|                                                                           |                                                                       |                                                                           |                                                                            |
| Increased case detection                                                  | 2.1 Development of joint national guidelines (TB/IMCI/HIV/Hospital care)  
2.2 Role delineation for management, stabilization and referral of TB in children at primary and referral levels  
2.3 Adapted tools and training material.  
2.4 Integrated training  
2.5 Develop or revise algorithm with or without rapid diagnostics (Xpert MTB/RIF).  
2.6 Strengthening household and close contact tracing  
2.7 Engage community and NGOs for case detection | | • Number of children screened for TB (% index cases).  
• Number of children with TB (by age, TB type, % case load).  
• Numbers detected by contact screening (%). Numbers referred. |
| 3. Ensured optimal case management by NTP and private sector providers    | 3.1 standardised treatment protocols                                   | 3.1.1 Development/ updating national treatment protocol / guidelines  
3.1.2 Harmonization of all existing guidelines within the country  
3.1.3 Dissemination of standardised treatment guidelines  
3.1.4 Inclusion of TB management in existing paediatric guidelines | • Treatment success rate  
• Stock out of paediatric TB drug  
• Number of partners involved in child TB case management and report to NTP |
<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.5 Training of health workers and partners on treatment protocols.</td>
<td>3.1.6 Ensuring supervised therapy (DOT) for children: 3.1.7 Ensuring family centred TB management approach 3.1.8 Ensuring regular monitoring and supervision</td>
</tr>
<tr>
<td>3.2 Ensured continuous availability of quality-assured child-friendly drugs and diagnostic supplies</td>
<td>3.2.1 Promoting manufacturers to produce children friendly drugs 3.2.2 Ensuring accurate forecasting of quality-assured child-friendly drugs and diagnostic supplies according to quarterly reports; 3.2.3 Maintaining adequate buffer stocks and strengthening distribution system. 3.2.4 Training of procurement officer on paediatric TB drugs</td>
</tr>
<tr>
<td>3.3 Multi-disciplinary approach</td>
<td>3.3.1 Integration with the existing social support system – food and nutrition, transportation, microfinance 3.3.2 Engagement of community and NGOs 3.3.3 Engagement of private hospitals</td>
</tr>
<tr>
<td>4.1 Improved BCG vaccination</td>
<td>4.1.1 Collaboration with EPI programme for increased BCG coverage 4.1.2 Development of policy / guidelines on IPT (if required; else harmonize existing policies) 4.1.3 Knowledge dissemination (Training of health workers) 4.1.4 Supervision and monitoring for ensuring implementation of IPT</td>
</tr>
<tr>
<td>4.2 Increased uptake of IPT</td>
<td>4.2.1 Development of policy / guidelines on IPT (if required; else harmonize existing policies) 4.2.2 Knowledge dissemination (Training of health workers) 4.2.3 Maintain contact register 4.2.4 Supervision and monitoring for ensuring implementation of IPT</td>
</tr>
<tr>
<td>4.3 Improved infection control measurement</td>
<td>4.3.1 Develop/review national infection control policy 4.3.2 Develop/review and implement facility based infection control SOP 4.3.3 Develop brochure/leaflet to increase awareness at the community level</td>
</tr>
<tr>
<td>5. Improved surveillance, recording reporting and data analysis</td>
<td>Improved surveillance system 5.1 Assignment of focal point for child TB related data. 5.2 Ensuring M&amp;E human resources at field level 5.3 Reviewing forms and data collection tool to capture age breakdown as per national standard 5.4 Collaboration with other programmes (MCH, EPI, HIV) 5.5 Development of SOP for data flow 5.6 Provision of regular data analysis and feedback</td>
</tr>
<tr>
<td></td>
<td>• BCG coverage  • Proportion of eligible children on IPT  • Completeness of age breakdown in quarterly report</td>
</tr>
</tbody>
</table>
| 6.1 Improved advocacy | 6.1 Development of advocacy materials focusing on different groups such as policymakers/MCH/pediatric society/NGOs/Health care workers/Medical/nursing students | • Number of IEC materials developed and distributed  
• Number of task based training organized |
|----------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 6.2 Improved community awareness | 6.1.1 Development of community and family IEC materials.  
6.1.2 Delivering key messages through community groups and mass media. | |
| 6.3 Increased capacity of health care workers through education and training. | 6.3.1 Performing task analysis  
6.3.2 Identifying skill set at different levels  
6.3.3 Development of training materials and curriculum  
6.3.1 Task based training | |

<table>
<thead>
<tr>
<th>7. Operational research</th>
<th>Operational issues identified and analysed</th>
<th>• Number of operational issues identified and analysed</th>
</tr>
</thead>
</table>
|                        | 7.1 Identification of operational research needs  
7.2 Identification of research capacity building needs  
7.3 Identification of research support and partnerships  
7.4 Conducting operational research  
7.5 Dissemination of OR findings  
7.6 Using the evidence in policy and plan development | |
2.4.3 Partnership matrix

Meeting participants also brainstormed on partnership matrix and identified roles and responsibilities of different actors and different programmes.

<table>
<thead>
<tr>
<th>Programmes and partners</th>
<th>Roles and responsibilities</th>
</tr>
</thead>
</table>
| **National TB programmes** | Policy development and leadership  
Advocacy for child TB within and beyond the NTP  
Case detection and management  
Implementing preventive therapy  
Ensuring quality assured child friendly drug supply  
Data improvement and management  
Training |
| **Maternal and child health programmes** | Integrate child TB management in primary health care  
Integrated management of childhood illness (IMCI)  
Recording and reporting  
Training |
| **HIV programmes** | Screening for TB in HIV+ children  
PIT for HIV+ children (where TB has been excluded)  
Management of TB and HIV in children |
| **Expanded programme on immunization** | Improve BCG coverage |
| **Paediatricians and paediatric associations** | Advocacy  
Act as a referral center  
Training |

2.4.4 Technical assistance need

Participants requested technical assistance in some areas:

<table>
<thead>
<tr>
<th>Objective 1 – Political advocacy, collaboration</th>
<th>China requested advice on effective approaches to advocate for TB control at high-level.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 2 – Improved case detection</td>
<td>Lao People's Democratic Republic is currently recruiting TA, microbiologist full-time for National Referral Laboratory.</td>
</tr>
</tbody>
</table>
| Objective 3 – Improved management | Cambodia, Fiji, Mongolia, Papua New Guinea and Viet Nam requested assistance with management of MDR-TB in children.  
The Philippines requested support in an assessment of logistical management. |
| Objective 5 – Recording and reporting | Viet Nam indicated support is needed in data analysis for child TB, MCH and malnutrition.  
Mongolia requested support for recording child TB burden. |
| Objective 6 – Community awareness, health worker training | China requested assistance for child TB training.  
Lao People's Democratic Republic requested support for the integration of child TB training into existing training.  
The Philippines identified need for communication support, integration of child TB into the TB training. |
| Objective 7 – Operational research | Cambodia, China, Fiji, Lao People's Democratic Republic, Mongolia, the Philippines requested support. |
2.5 **Formation of a Regional Child TB Task Force**

Participants of the Meeting formed an informal taskforce called 'The Regional Childhood TB Taskforce' on the Development of Child Tuberculosis Action Plans in the Western Pacific Region. The Regional Childhood TB Taskforce will support members to finalise national action plans and convene a regional workshop (with partners).

Chair: Professor Steve Graha  
Co-Chair: Dr James Amini (PNG); Nguyen Thein Huong (Viet Nam)  
Vice Chair: Dr Celine Garfin (Philippines); Dr Lin Zhou (China)  
Members: All participants of the meeting  
Secretariat: WPRO, WHO

Objectives and activities of the taskforce include:

1. Increase awareness of the child TB disease burden in the Asia-Pacific region (advocacy)  
   - Information brochure to all NTP/MCH and Paediatric Society heads.  
   - Identify a Child TB champion in each country.  
   - Improved understanding on disease burden (fact sheet, journal article).

2. Assist the development of pragmatic, contextualized national child TB action plans  
   - Promote "home grown / bottoms-up" action plan for child TB and provide guidance.  
   - Develop/update National Child TB guidance documents.

3. Monitor & support implementation of these plans  
   - Monitor the progress of the development of child TB action plan (stand-alone or part of national strategic plan) by July 2014.  
   - Six monthly updates on implementation and annual review of progress.

4. Provide an education resource (training).  
   1. Assist development of training courses.  
   2. Link with efforts by The Union, CDC, The Sentinel group and other partners.  
   3. Regional train-the-trainer course.

5. Facilitate collaboration/integration between programs, around child TB (NTP, MCH, Paediatric societies, Paediatric hospitals)  
   - Clarify the role/contribution of each partner.  
   - Share experiences.  
   - Integration of TB into IMCI approaches.  
   - Online forum, clinical discussion.

2.6 **Concluding remarks**

Countries expressed their thanks and gratitude to WHO, technical advisors and other country participants and reiterated their commitment to zero Tb deaths in the children.
3. CONCLUSIONS AND RECOMMENDATIONS

Participants brought their experience, challenges and enthusiasm to develop priorities for strengthening child TB activities. The meeting established priorities for strengthening childhood TB activities in this Region. The meeting identified seven priority objectives for the Region:

1) Improved political commitment and collaboration with different stakeholders (technical programmes like maternal and child health, expanded programme on immunization; technical partners like UNICEF, World Vision and professional associations like paediatric associations, private providers).

2) Improved case detection (contact screening, diagnostic algorithm, use of Xpert).

3) Improved case management and logistical management (clinical management, drug supply, social support).

4) Improved prevention (vaccine, isoniazid preventive therapy (IPT), infection control (IC)).

5) Improved recording, reporting and data analysis (including hospital and private sector).

6) Improved awareness of community and capacity building of health care worker.

7) Operational research.

The meeting participants then developed a framework of inputs and outputs to achieve the priority objectives. Countries agreed to develop/update and share (by the next six months) their country specific plans based on the framework developed.

Participants of the Meeting formed an informal taskforce called 'The Regional Childhood TB Taskforce' on the development of child tuberculosis action plans in the Western Pacific Region to support members to finalise national action plans and convene a regional workshop in collaboration with partners.
PROGRAMME OF ACTIVITIES

Wednesday, 26 March 2014

08:30–09:00 Registration and Welcome
09:00–09:15 Opening ceremony and Welcoming remarks
09:15–09:30 Workshop, Expectation, Objectives, Agenda, Norms and Logistics
09:30–10:00 Child TB disease burden (global and regional)
10:00–10:30 Coffee break (group photo)
10:30–11:00 Child health: overview of the Western Pacific Region
11:00–11:30 Child TB disease risk and spectrum
11:30–12:00 Roadmap for childhood tuberculosis
12:00–12:30 Practical issues at country level
12:30–13:30 Lunch
13:30–15:30 Country poster presentations – Status quo in each country
15:30–16:00 Coffee break
16:00–16:30 Group work: Summarize major issues to address in each country
16.30–17.00 Plenary: Grouping major issues and developing framework for Regional Childhood TB Action Plan
18:00 Reception

Thursday, 27 March 2014

08:30–09:00 Policy: management principles
09:00–09:30 Implementation and enabling environment
09:30–10:00 Monitoring and evaluation
10:00–10:30 Coffee break
10:30–11:30 Issues to action: Brainstorming on the major issues identified on day 1
(SG)  (BM)  (KO)

11:30–12:30  Plenary feedback – Groups 1, 2, 3,  
12:30–13:30  Lunch  
13:30–13.50  Towards Zero Deaths  
13.50–14.10  Child TB: Global Fund viewpoint  
14:10–14:30  Child-friendly TB drugs  
14:30–15:00  Paedriatic drug-resistant tuberculosis  
15:00–15:30  Coffee break  
15:30–17:00  Group work: drafting action plans  

Friday, 28 March 2014
08:30–09:30  Group work (cont): drafting action plans  
09:30–10:00  Group work: identifying technical assistance need (country specific)  
10:00–10:30  Coffee break  
10:30–12:00  Plenary: presentation of group work  
12.00–12.30  Formation of a Regional Child TB Task Force  
Next steps and closing  
12:30–13:30  Lunch  
13:30–15:00  First meeting of Regional Child TB Task Force

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