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Elizabeth Glaser Pediatric AIDS Foundation

Unitaid
Innovation in Global Health

NATIONAL POLICY ASSESSMENT:

Creating an Enabling Environment for Effective and Innovative Pediatric Tuberculosis Diagnostic and Treatment Interventions

As part of its Unitaid-supported Catalyzing Pediatric Tuberculosis (CaP TB) project, the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) carried out an assessment of the national policy landscape for childhood tuberculosis (TB) in 10 countries (Cameroon, Côte d'Ivoire, Democratic Republic of Congo, India, Kenya, Lesotho, Malawi, Tanzania, Uganda, and Zimbabwe). Information was collected from National TB programs, and confirmed with them, including information until May 30, 2018.

This policy assessment will be used to promote the strongest possible policy, regulatory, and financial environment for introducing and scaling up effective and innovative pediatric TB diagnostic and treatment interventions. The policy indicators closely follow the key actions of the *The Roadmap towards ending TB in children and adolescents*[1], a new global advocacy document launched September 2018 by the World Health Organization (WHO) and several other global health actors, including EGPAF. Below is a brief description of findings from the policy landscape matched against a selection of the *Roadmap's* key actions, together with recommendations on how to meet the *Roadmap's* "Implementation Milestones".

Strengthen advocacy at all levels

Related Policy Indicator	Policy assessment result
Country had a TB public outreach campaign.	Half of the countries had at least one public event on childhood TB in 2018. However, a single event is no substitute for an outreach campaign.
CALL TO ACTION: Countries need to ensure high public awareness of the childhood TB epidemic. Public outreach campaigns improve general awareness of key issues related to pediatric TB and can foster advocacy by affected communities for better access to TB prevention and treatment. It is important to involve families affected by TB in related campaigns at the community level. Links to the *Roadmap's* Key Action 1 "Strengthen advocacy at all levels" and Key Action 3 "Foster functional partnerships for change".	

Foster national leadership and accountability

Related Policy Indicator	Policy assessment result
Childhood TB is included in the National TB Strategic Plan (NSP) with priority intervention areas specified.	All countries have a NSP, which included childhood TB, but just six of 10 specifically include all, or almost all, key intervention areas.
An active Pediatric TB National Working Group (PTNWG) is operational.	Six of 10 countries have an active Pediatric TB National Working Group, and two additional countries have a dedicated pediatric work stream in the general TB working group.
There is a National TB Program (NTP) focal person for childhood TB.	All countries, except one, have a focal person.
CALL TO ACTION: Countries need to prioritize all key childhood TB interventions in national plans, supported by adequate governmental structures such as PTNWGs and focal points. It is promising that childhood TB is included in NSPs and that the majority of countries have either an active PTNWG or focal point. However, specifics in NSPs are lacking, and most do not cover all the priority pediatric TB interventions. Links to the *Roadmap's* Key Action 2 "Foster national leadership and accountability" and Key Action 7 "Scale-up child and adolescent TB case-finding and treatment".	

[1] The key action icons in this policy assessment are shared through the Creative Commons Attribution, from the *Roadmap towards ending TB in children and adolescents*. Geneva: World Health Organization; 2018-09-26 http://apps.who.int/iris/bitstream/handle/10665/274374/9789241514668-eng.pdf?ua=1

Increase funding for child and adolescent TB programs

Related Policy Indicator	Policy assessment result
Childhood TB is included in the NSP budget with priority areas of interventions clearly earmarked.	Of those NSP budgets that were available (9/10), one country did not earmark activities for children. Of the remaining countries, the majority (5/8) did not have funds earmarked for key interventions, such as active case-finding or multi-drug resistant (MDR)-TB treatment.
The Global Fund funding request (2017-2019) includes activities for childhood TB	Global Fund grant requests include activities for childhood TB in most (7/10) countries, but often funding requests lack specifics and most do not mention all priority interventions.
CALL TO ACTION: Countries must ensure that childhood TB interventions are adequately funded with earmarked budgets. All activities for childhood TB prevention, detection, diagnosis, and treatment should be funded by national governments or donors. Without earmarked budgets to back up these interventions, they are not likely to be implemented. Links to the *Roadmap's* Key Action 4 "Increase funding for child and adolescent TB programs	

Bridge the policy-practice gap

Related Policy Indicator	Policy assessment result
National guidelines and/or standalone pediatric TB guidelines include a diagnostic algorithm for diagnosis of pediatric pulmonary TB. National guidelines and/or standalone pediatric TB guidelines include a diagnostic algorithm for diagnosis of pediatric extra-pulmonary TB.	An algorithm for pediatric pulmonary TB diagnosis is available at national-level in eight of the 10 counties. An algorithm for pediatric extra-pulmonary TB diagnosis is available at national-level only in six of the 10 countries.
Xpert MTB/RIF is recommended (rather than conventional microscopy and culture) as the initial diagnostic test in children.	Eight of the 10 countries recommend Xpert testing as the initial diagnostic in children. However, standard operating procedures (SOPs) on sample collection and sample processing procedures are lacking (see below).
Availability of SOPs for sample collection at national level.	With the exception of gastric lavage, the majority of countries (7/10) do not have SOPs for collection of samples that may be needed to diagnose childhood TB.
SOPs for interpretation of chest X-ray (CXR) in pediatric patients with presumptive TB are available at national-level.	Very few countries have SOPs for CXR interpretation.
The reformulated oral dispersible first-line, fixed-dose combination (FL FDCs) are recommended in treatment regimens for children <25 kg.	All countries surveyed recommend FL FDCs for treatment for children with TB; and the drugs are registered – or in the process of registration – in eight of 10 countries. Nonetheless, they are only included in two countries' *Essential Medicines Lists* (EMLs).
There is a plan for human resource (HR) capacity-building for childhood TB and specific training materials and curricula for pediatric TB are available.	Information was available for nine out of the 10 countries. Although training material /curricula targeting specifically pediatric TB are available in most countries (8/10), only three of them have developed training programs aimed at HR capacity building specifically for childhood TB. Half of the countries have a program for monitoring and supportive supervision for childhood TB activities.
CALL TO ACTION: While guidelines are generally updated (beside a few areas, e.g. algorithms for diagnosis of extra-pulmonary TB), practical guidance tools such as SOPs, job-aids and wall charts are often not available. These tools are critical to help bridging the policy-practice gap. Similarly, while most countries have childhood TB training material available, what is missing is a clear plan for HR capacity building to manage childhood TB, as well as defined and funded training programs for childhood TB. Regarding MDR-TB, child-friendly formulations are typically not included in national health policy recommendations. Links to the *Roadmap's* Key Action 5 "Bridge the policy-practice gap"	

Implement and expand interventions for prevention

Related Policy Indicator	Policy assessment result
Childhood TB preventive therapy is included in the national TB strategic plan.	All national strategic plans consulted include childhood TB preventive therapy.
Shorter and safer treatment regimens are recommended by national guidelines for preventive therapy in children.	All countries support six months of Isoniazid (INH) regimen. In only one of the 10 countries surveyed, guidelines also recommend a shorter regimen (three months of isoniazid and rifampicin) for preventive therapy.
National guidelines recommend that HIV-positive children >12 months old in whom active TB disease is excluded are offered preventive treatment. National guidelines recommend that HIV-infected infants (age < 1 year) who have known contact with a TB case and in whom active TB disease is excluded are offered preventive treatment. National guidelines recommend that children who are household or close contacts of people with TB and who, after an appropriate clinical evaluation, are found not to have active TB are offered preventive therapy.	All countries surveyed have national guidelines specifically addressing TB preventive treatment for children. Nine of 10 countries' guidelines are in-line with the WHO recommendations regarding preventive therapy for HIV-positive children. However, of HIV-negative children, only children < 5 years who are contacts of people with TB are recommended as a target population for preventive therapy.
National guidelines recommend community-based contact tracing and community-based TB screening for identified contacts	Nine of 10 countries recommend screening children who are in contact with people with TB.

CALL TO ACTION: update and fully implement TB guidelines

The surveyed countries have most essential policies and guidelines in place, but there are important policy-practice gaps that now must be addressed. In addition, with new WHO latent TB infection (LTBI) guidelines released in 2018, it will be important for national childhood TB guidelines to be updated, to extend the age range for eligibility of TB preventive therapy and to recommend shorter regimens, such as three months of Isoniazid-rifampicin.

Links to the *Roadmap's* Key Action 6 " Implement and expand interventions for prevention" and Key Action 8 "Implement integrated family- and community-centred strategies" and Key Action 5 "Bridge the policy-practice gap".

Implement integrated family- and community-centred strategies

Related Policy Indicator	Policy assessment result
National guidelines and/or pediatric stand-alone guidelines recommend integration of pediatric TB services into: • Prevention of mother-to-child HIV transmission (PMTCT) clinics • Maternal, newborn, and child health (MNCH) services • Nutrition centres • General outpatient ward	Only one country recommended integration of childhood TB services across all key pediatric health care entry points, and most other countries' recommendations on integration were partial or unclear. Six of 10 countries recommended TB screening within PMTCT service delivery points. But of these six, only three allow for TB treatment initiation in those services. Recommendations to integrate TB diagnosis and treatment, including treatment initiation and follow-up, was very poorly supported across countries. Only three of the 10 counties had guidelines supporting integration across all four key pediatric health care entry points
Childhood TB included in *Integrated Management of Childhood Illness* (IMCI) guide.	Six out of 10 countries did not include TB screening algorithms in their IMCI guides.
National guidelines recommend all children living with HIV are screened for TB.	All countries surveyed recommend all children living with HIV to be screened for TB.
National guidelines recommend periodic systematic active case-finding and TB screening for pediatric TB in defined settings (i.e. schools, outreach to communities in high TB prevalence regions, etc.).	Only four out of 10 countries have national guidelines that recommend systematic active case-finding for pediatric TB within these settings.
The national program clearly defines a role for private providers/private health facilities in pediatric TB care	More than half of the countries have provisions for private sector involvement, but the extent varies.

CALL TO ACTION: Better integration of childhood TB into other health access points is required.

Policies are not supporting integration of childhood TB services into common pediatric entry points, with missed opportunities to screen, diagnose, and treat TB in children.

Links to the *Roadmap's* Key action 8 "Implement integrated family- and community -centred strategies".

In conclusion, the policy landscape shows that all surveyed countries have the basic elements needed to improve pediatric TB prevention, diagnosis, and treatment, such as inclusion of priority interventions in National Strategic Plans and strong national guidelines on the use of reformulated FL FDCs. Yet most countries do not have a fully enabling policy, regulatory, and financial environment for introducing and scaling-up innovative diagnostics and treatment in place. For example, there are still too many missed opportunities to identify TB cases, with significant gaps in national plans, budgets, and guidelines on active case-finding and contact tracing. Insufficient health care worker training programmes for childhood TB and lack of critical practical guidance tools, SOPs and job aids also hinder implementation at facility-level. Earmarked funding for high priority interventions also appears to be a shortcoming in most countries, though the lack of available information hinders full analysis. Finally, and critically, countries need to strengthen policy guidance and systems for better integration of childhood TB services into other pediatric entry points in order to identify more children with TB and initiate them on treatment sooner.

Djo Djo Makufi (7 years old) and other children at the St. Pierre Health Center in Kinshasa, DRC. The children are receiving TB treatment at a dedicated TB clinic supported by EGPAF through the Unitaid-funded CaP TB project.

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Unitaid accelerates access to innovation so that critical health products can reach the people who most need them.

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