DO WE HAVE THE MOST UPDATED COUNTRY POLICIES TO END TB?

Stop TB Partnership

Hosted by UNOPS

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Introduction

There is a dream of ending the scourge of TB, a leading infectious disease killer. The steady decline in TB incidence and mortality was reversed between 2020 and 2021 by the Covid pandemic. The pandemic resulted in an excess of half a million deaths. In 2022 an all-time high in notification (7.5 million) was reported. However, the world is off track to achieving the End-TB targets. The net reduction in deaths from TB, from 2015 to 2022 was 19%, far from the WHO End-TB strategy milestone of a 75% reduction by 2025. The net reduction in incidence from 2015 to 20221 was 8.7%, far from WHO End-TB strategy milestone of a 50% reduction by 2025 the world was, therefore, only halfway to the first milestone of the End TB Strategy. Strong TB policies along with strong health systems, leadership and governance are important for Ending TB. To close the gaps for diagnosis and treatment of DS-TB, DR-TB and TB infection it is important to rapidly adapt national policies based on recent evidence and embrace new technologies with promise of greater capability for diagnosis and treatment adherence. Countries are expected to rapidly develop or adopt policies and interventions that are based on best evidence for adequate person-centred care in a variety of geographical, economic and social settings.

AIM

In this report we present the findings of Step Up For TB (SUFT) 2023 survey, the aim of which was a landscape analysis of recent global TB guidelines adopted by the national TB programs (NTP) and their alignment with global best practices. The analysis presents the perspective and opinion of Stop TB Partnership (STP).

Methodology

SCOPE AND PERIOD OF SURVEY

For SUFT 2023 the TB diagnostic, treatment and prevention guidelines considered were those issued by WHO between 2020 and 2022, except for one which was issued in 2015. Thus, at the time of conducting the survey, the countries had at least a year's time to adapt the global guidelines. The survey assessed the adoption of the recent global guidelines by countries and did not assess the process of implementation. The survey was conducted during February – April 2023.

DEVELOPMENT OF THE SURVEY QUESTIONNAIRE

A questionnaire developed by Stop TB Partnership included eight questions on screening and diagnosis[2], [3],[4],[5],[6],[7], four on treatment[8],[9],[10],[11], two on model of care and patient support[12], and three on treatment of TB infection[13],[14],[15],[16]. The questionnaire was placed on the SUFT portal (https://suft.stoptb.org/) of Stop TB Partnership (STP). All 17 questions were multiple choice with the instructions to select one or multiple options, to indicate whether policies had been adopted and if yes, then was it for entire population or only for a particular group (high risk or specific age group). The respondents were requested to upload supporting documentation.

30 COUNTRIES

initially invited to participate in the survey

responses from

20 were considered complete and analysed

All 20 participating countries were considered

high burden for TB or TB/HIV or MDR-TB

by WHO

9 from Africa | **6** from Asia | **5** from Eastern Europe

DATA COLLECTION

A total of 30 countries were initially invited to participate in the survey. Responses from 20 were considered complete and analysed further for this 2023 SUFT survey. All 20 participating countries were considered high burden for TB or TB/HIV or MDR-TB by WHO . Nine countries were from Africa, six from Asia and five from Eastern Europe*.

Countries could also revert any time and update their data on the SUFT portal or request the STP Secretariat staff to do so. In some instances, the civil society network of the country supported the NTP in this process.

Responses were reviewed by the STP team and NTPs were contacted for clarifications through messaging on the SUFT portal and calls. After confirmation the final responses were coded and analysed in Microsoft Excel. The results were double-checked by two staff of the STP Secretariat.

The results of this survey were not comparable with past SUFT surveys because of rapid updates in WHO TB guidelines. In other words, the policies assessed have differed in each SUFT survey. The readers are advised to visit the SUFT portal to see year-wise SUFT data for each country by generating tables, trend lines and fact sheets.

* 20 SUFT surveyed countries: Bangladesh, Democratic Republic of the Congo, Ethiopia, Indonesia, India, Kenya, Kyrgyzstan, Kazakhstan, Mozambique, Nigeria, Philippines, Pakistan, Tajikistan, Ukraine, Uganda, Uzbekistan, Viet Nam, South Africa, Zambia, Zimbabwe

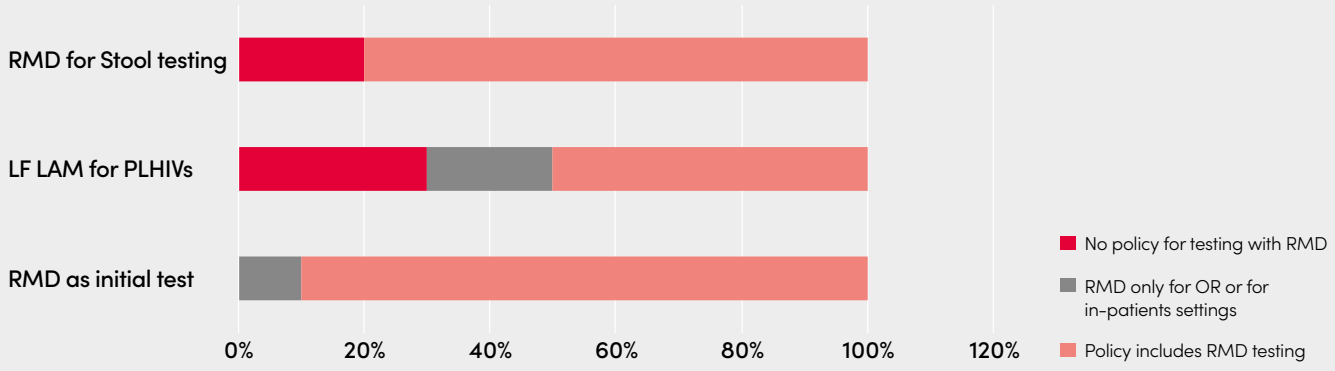
Results

Detailed results for the 20 surveyed countries are presented in Table 1. Of the 37 policies/indicators assessed, all countries had adopted at least half of the policies; five countries, Ethiopia, Kazakhstan, Kyrgyzstan, Tajikistan and Ukraine had adopted more than 80% of the policies.

SCREENING

Nearly a third (30%) of the countries did not have a policy for screening and providing preventive treatment for children under five years of age but all countries had a policy for screening and treating TB infection among adults and children aged five years or more.

CHART 1: Countries' policies with RMD included into TB diagnostic algorithm



TESTING WITH RAPID MOLECULAR DIAGNOSTICS

All countries had a policy of rapid molecular diagnostics (RMD) as an initial test for those with presumptive TB though one country uses it only in high-risk groups; Only 50%% of the countries had included LF-LAM for PLHIVs in their national policies for both in-patients and out-patients, 10% had included it for in-patients only and 10% for operational research (OR). Eleven of 20 countries were considered high-burden for TB/HIV - eight (72.7%) of these had adopted the policy for LF-LAM whereas 44% countries that were not high-burden for TB/HIV had also adopted it. A majority of the countries (80%) had the policy for stool based RMD testing for TB diagnosis in children. (Please see chart 1).

CHART 2: Countries' policies for resistance testing among all those confirmed to have TB

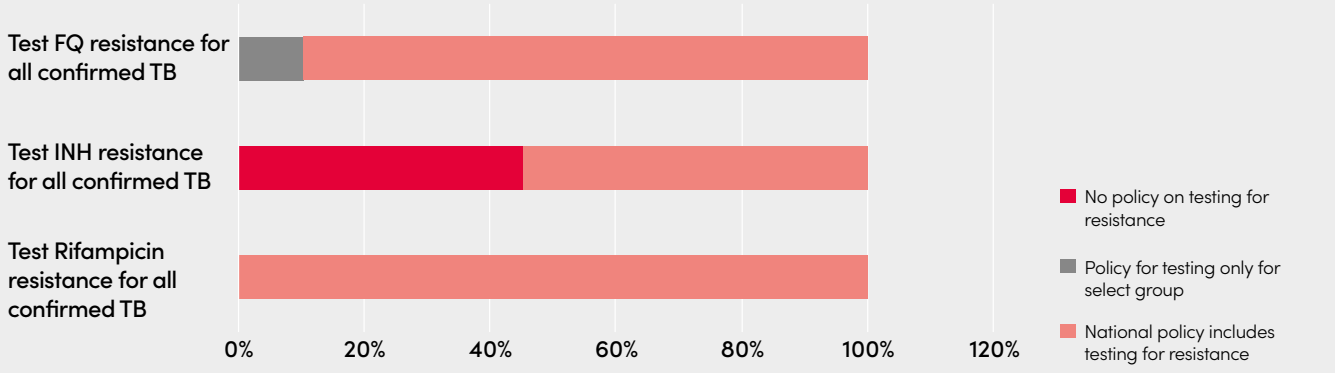


TABLE 1

	Questions/ indicators	1,1				1,2	**1,3**	1,4	**1,5**	1,6	1,7	1,8			2,1	2,2	2,3	2,4
		HHC screening for DS-TB		HHC screening for DR-TB								DST methods available routinely						
S. No.	Indicator	for children < 5 y.o.	adults and children > 5 y.o.	for children < 5 y.o.	adults and children > 5 y.o.	RMD initial test	LF LAM in PLHIVs	RMD for Stool testing	RR test for all confirmed TB	INH resistance testing for all confirmed TB	FQ resistance testing for all confirmed TB	BDQ	Delamanid	Linezolid	4mo regimen (2HPMZ/2HPM) for DS-TB	9mo oral regimen DR/RR adults	BPaLM-6mo-RR&preXDR adult	4mo(2HRZ(E)/2HR) for DS-TB child
1	Bangladesh	0	1	0	1	1	0	1	1	1	1	1	0	0	0	1	1	0
2	CongoDR	1	1	1	1	0,5	0,5	1	1	0	1	0	0	0	0	1	0,5	0,5
3	Ethiopia	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0
4	India	0	1	0	1	1	0	1	1	1	1	1	1	1	0	1	1	0
5	Indonesia	0	1	0	1	1	0	1	1	1	1	1	0	1	0	1	1	0
6	Kazakhstan	1	1	1	1	1	0	0	1	1	1	1	1	1	0	1	0	0
7	Kenya	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	0	0
8	Kyrgyzstan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
9	Mozambique	1	1	1	1	1	0,5	0	1	0	0,5	1	1	1	0	0,5	0	0
10	Nigeria	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	0,5	1
11	Pakistan	0	1	0	1	1	0	1	1	1	1	1	0	0	0	1	1	0
12	Philippines	0	1	0	1	1	0	0	1	0	1	1	0	1	0	1	1	0
13	South Africa	1	1	1	1	1	1	1	1	0	0,5	0	0	0	0	1	0,5	0
14	Tajikistan	1	1	1	1*	1	1	1	1	1	1	1	1	1	0	0,5	0,5	1
15	Uganda	1	1	1	1	0,5	1	0	1	0	1	1	1	1	0	1	0	0
16	Ukraine	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0,5	0
17	Uzbekistan	1	1	1	1	1	0,5	1	1	1	1	1	1	1	0	1	0,5	0
18	Viet Nam	0	1	0	1	1	0,5	1	1	1	1	1	0	1	0	1	1	0
19	Zambia	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	1	0,5
20	Zimbabwe	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	0	0

0	not answered
0,5	yes for operational research (OR); psartially met or for select group of people (please see text)
1	yes
1*	yes and additionally includes contacts outside the household
n/a	not answered and don't know
dk	don't know

3,1	3,2							4,1				4,2			4,3			
Model of care	Care and support interventions							TB Infection Treatment target population				TestTB infection			Short regimen for treating TB Infection			
Hospitalization for DR-TB treatment initiation	Patient Education	Staff Education	Material Support	Psychological support	Tracers	VOT-Video-observed-treatment	Digital medication monitor	<5-PLHIV	>5-PLHIV	<5HHC of DS-TB	>HHC of DS-TB	TST	IGRA	New generation skin test	3HP	4R	3RH	1HP
0	1	1	1	1	1	1	1	0	1	0	1	1	1	0	1	1	1	0
0	1	1	1	1	0	0	0	1	1	1	1	0,5	0,5	0	1	0	0	0
1	1	1	1	1	1	0	0	1	1	1	1	1	1	0	1	0	1	0
0	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	0
0	1	1	1	1	1	0	1	0	1	0	1	1	1	n/a	1	0	1	0
0,5	1	1	1	1	1	1	n/a	1	1	1	1	1	1	1	1	1	1	1
0	1	1	1	1	1	0	0	1	1	1	1	1	0,5	0	1	0	1	0
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0,5	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1
0,5	1	1	1	1	1	0	0	1	1	1	1	0	0	0	1	0	1	0

DRUG SENSITIVITY TESTING

A national policy for testing for resistance among all people starting TB treatment was available –for rifampicin resistance in 100%, for isoniazid resistance in 55%, and for fluoroquinolone resistance in 90% countries. (Please see chart 2). National policy for drug sensitivity testing was available –for Bedaquiline in 80%, for Delamanid in 55%, and for Linezolid in 70% countries. (Please see chart 3).

ADOPTION OF SHORT REGIMENS

Only 5% countries had included four-month regimen (2HPMZ/2HPM) for treatment of DS-TB in adults in national policy. 80% countries included the 9-month all-oral regimen for treatment of MDR/RR-TB in adults. 40% countries included routine use of 6-month BPaLM regimen for treatment of MDR/RR-TB and pre-XDR TB in adults. 10% countries included the 4-month regimen of 2HRZ(E)/2HR for treatment of non-serious drug-susceptible TB in children. (Please see chart 4)

CHART 3: Countries' policies policies indicate DST

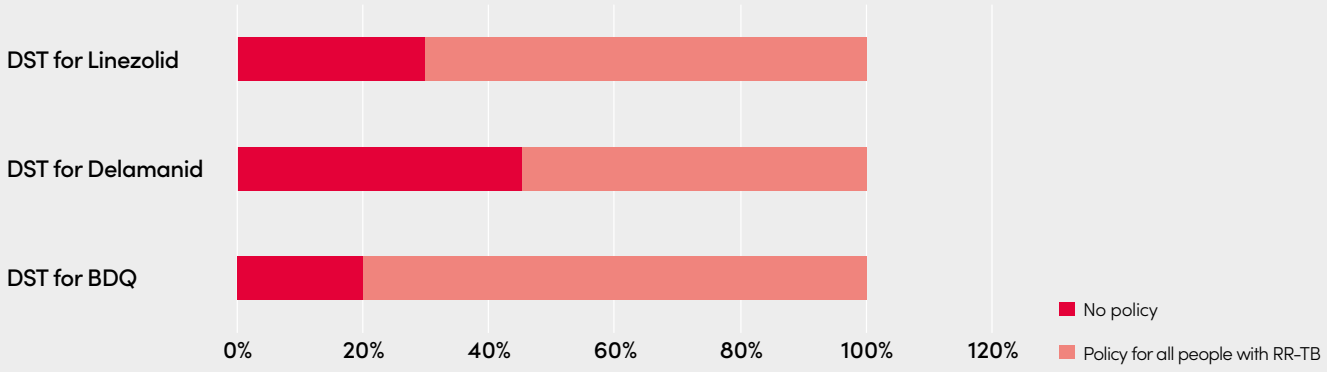


CHART 4: Countries' policies with shorter TB treatment regimens

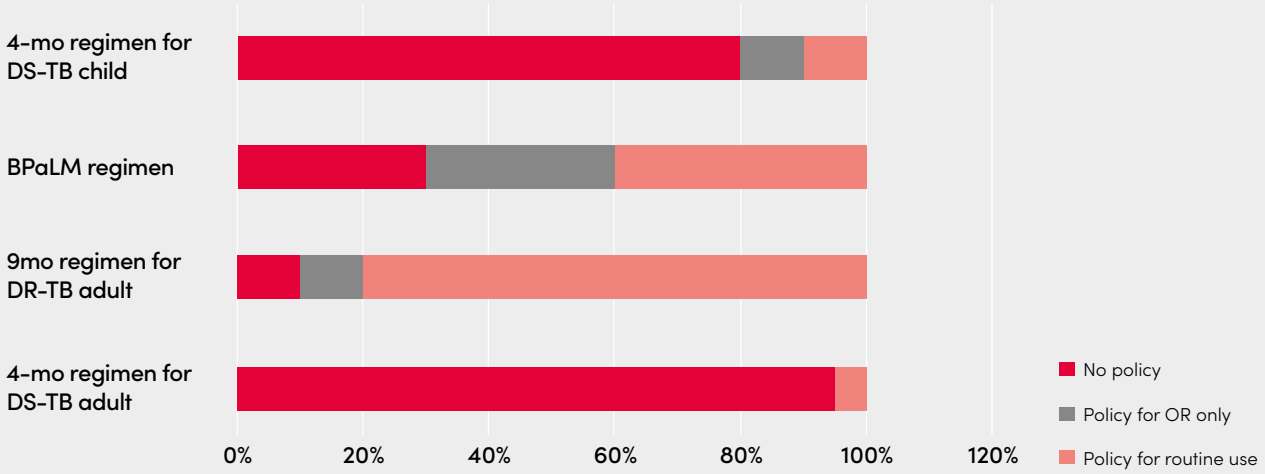
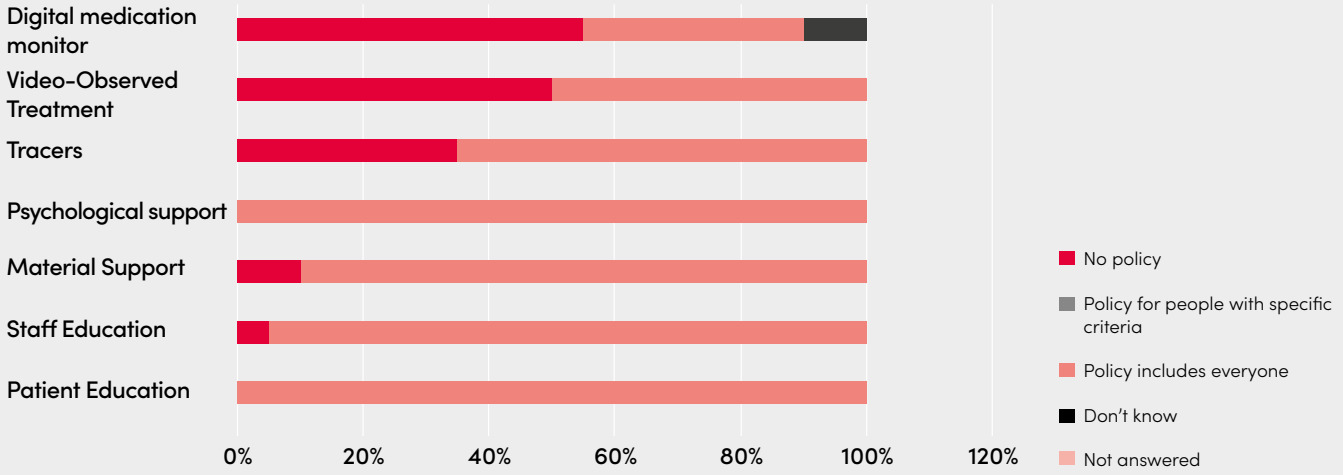


CHART 5: Countries on policies for model of care



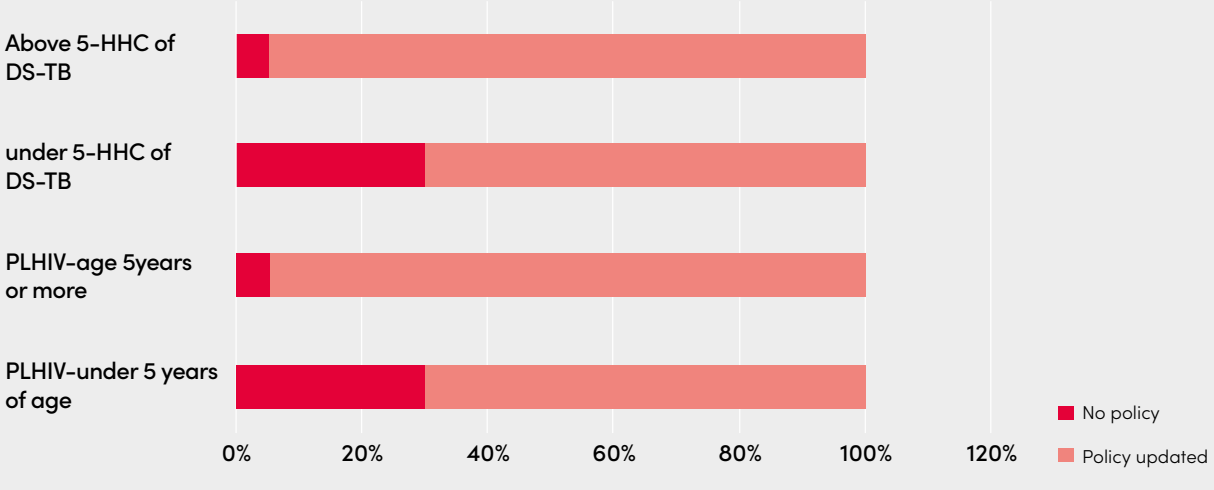
TREATMENT MODEL

50% countries did not recommend hospitalization for initiation of treatment for DR-TB in their national policies.

SUPPORTING PEOPLE ON TREATMENT

Although national policies of all countries included patient education, staff education and psychosocial support but material support i.e., nutrition or financial support was included only in 18 (90%) countries. Tracers were included in 13 (65%) countries. Video-observed treatment (VOT) was included in half of the countries and digital monitoring was included in the national policy of seven (35%) countries. Four (20%) countries did not include tracers (communication, home visit, SMS or call by mobile phone) or VOT or digital medication monitor support for people on TB treatment in their national policy. These are Democratic Republic of Congo, Mozambique, Nigeria, South Africa. (Please see chart 5)

CHART 6: Countries' policies to treat TB infection among targeted populations



DETECTION AND TREATMENT OF TB INFECTION

70% of countries had included children <5 living with HIV or household contacts of bacteriologically confirmed people on DS-TB treatment as target group for detection and treatment of TB infection and 95% countries had included children >5 and adults, either PLHIVs or household contacts, as target groups (Please see chart 6).

IGRA was included by 70% of the countries and 30% had included new generation skin test (MTb specific antigen) for diagnosis of TB infection (Please see chart 7).

All countries had adopted one or more of the recommended short regimens. The shortest regimen of one month of INH and Rifapentine was adopted by seven countries (Table 1) (Please see chart 8).

CHART 7: Countries' policies for testing TB infection

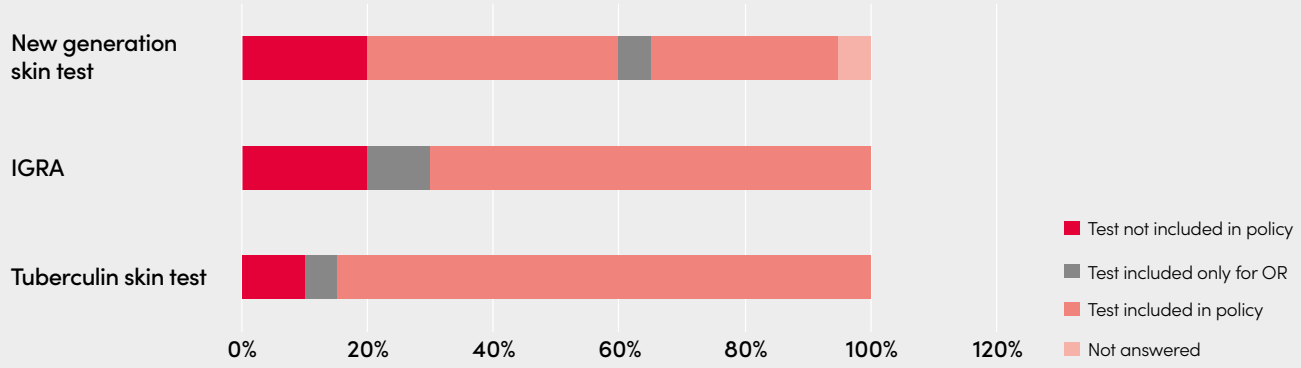
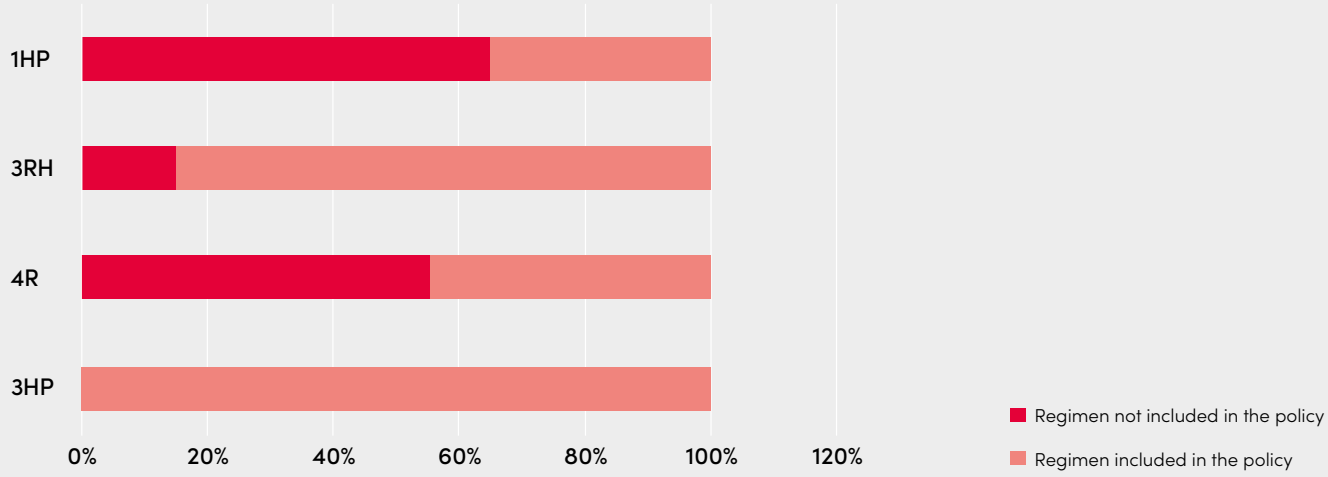


CHART 8: Countries' policies for shorter TPT regimens



Discussion

A change in policy could mean a change in medical management guidelines leading to changes in the procurement guidelines, information strategy, monitoring and evaluation system, and training of staff. These changes test the capacity and governance of health systems as well as political leadership. Countries adopt international guidelines and recommendations at a different pace. This diversity in policy uptake across countries underscores the importance of understanding the factors that influence such decisions and requires further understanding of the process. Global and national stakeholders should consider technical assistance where required. For political support for adoption and implementation of policy, greater partnership with civil society would be paramount.

In general, all the surveyed countries showed good adoption of recent policies on diagnostics. Most of the countries had adopted the policy for testing with RMD including with stool-based diagnosis for children. However, LF-LAM for PLHIVs had relatively lesser uptake but its adoption was higher in countries with high burden of TB/HIV compared to those who were not high burden.

For treatment, the 9-month treatment regimen for DR-TB had been adopted for adults in most of the countries along with sensitivity testing for Bedaquiline. Concern was for slow adoption of short treatment regimens for DS-TB. The slow adoption of adult regimens can be explained by lack of availability of FDCs and Rifapentine high market price, but there is no reason for a lack of adoption of short regimens (2HRZ(E)/2HR) for non-serious TB in children. Combined with the low notification seen globally for children this is an unwelcome situation and needs advocacy and attention of all stakeholders.

Half of the countries still have a policy of hospitalization for initiation of DR-TB treatment for people with specific criteria or routinely. These are a mix of countries from different geographies and with widely different prevalence of DR-TB. This survey does not match the policy with the actual hospitalization rates.

Knowing that hospitalization diverts domestic resources and contributes to loss of income and stigma for people on treatment, this issue needs more in-depth review. Harmonization of global criteria for hospitalization including pre-treatment weight/BMI, lung function, co-morbidities, and personal factors, is imperative.

Of concern was the fact four (20%) countries reported not having policies on tracers (communication, home visit, SMS or follow up by mobile phone) or video supported treatment or digital medication monitor support for people on TB treatment in their national policy. These are Democratic Republic of Congo, Mozambique, Nigeria, South Africa.

Limitation of the survey

Questions could have been misunderstood in this self-reporting survey. For instance, one country reported that they did not have screening policy for children under-5 years of age who are household contacts of DS or DR-TB. However, a web search showed that their treatment guidelines included screening and TB preventive treatment for children under the age of five years.

This survey only considered the adoption of policies at the national level. Countries which adopted the policies but did not implement them or implemented them only in a small area would have impact no different from the countries that did not adopt the policies. This survey does not differentiate between such countries. Nevertheless, adopting appropriate policies is the first step and this survey assesses this aspect.

Recommendations

The NTPs would achieve greater impact by accelerating the adoption of diagnostic and treatment policies.

Secondly, NTPs would benefit by analyzing how well the policies are being practiced. As an example, a review of hospitalization rates and its trends over the last few years would inform if the hospitalization policy is being followed as per the national guidelines.

Third, the NTPs can prioritize adoption of policies based on their program performance. Policies with potentially greater impact should be prioritized for adoption to achieve maximum impact. For example, if childhood notification is low adoption and scale up of stool based RMD could be prioritized.

Fourth, the TB community and civil society can work with NTP/MoH and other national stakeholders and use this SUFT 2023 report as an advocacy tool for rapid adoption and implementation of policies.

Fifth, for the global TB community, this survey has important learnings with regard to the key vulnerable populations (PLHIVs and children, in particular). Global partners need to plan technical assistance and other support for countries that for various reasons have not been able to adopt/adapt the recent guidelines.


Ethomid
Ethomid
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Endnotes

1 Global tuberculosis report 2023. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO

2 M2 – GI on scr 2021WHO consolidated guidelines on tuberculosis. Module 2: screening – systematic screening for tuberculosis disease. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO

3 M3 – dx 2020WHO consolidated guidelines on tuberculosis. Module 3: diagnosis – rapid diagnostics for tuberculosis detection. Geneva: World Health Organization; 2020. Licence: CC BY-NC-SA 3.0 IGO

4 M3 op HB- 21/22WHO operational handbook on tuberculosis. Module 3: diagnosis - rapid diagnostics for tuberculosis detention, 2021 update. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO

5 M4 – updated -22 WHO operational handbook on tuberculosis. Module 4: treatment - drug-resistant tuberculosis treatment, 2022 update. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO

6 End TB Strategy – 2015 World Health Organization. (2015). The end TB strategy. World Health Organization. https://iris.who.int/handle/10665/331326

7 M3- diagnosis update OpHB - 2021 WHO operational handbook on tuberculosis. Module 3: diagnosis - rapid diagnostics for tuberculosis detention, 2021 update. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO.

8 M4-DS TB tt 22WHO consolidated guidelines on tuberculosis. Module 4: treatment - drug-susceptible tuberculosis treatment. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO

9 M4- DR TB – 2020 WHO consolidated guidelines on tuberculosis. Module 4: treatment - drug-resistant tuberculosis treatment. Geneva: World Health Organization; 2020. Licence: CC BY-NC-SA 3.0 IGO

10 M4 – updated -22 (repeat) WHO operational handbook on tuberculosis. Module 4: treatment - drug-resistant tuberculosis treatment, 2022 update. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO

11 M5- childhood TB 22 WHO consolidated guidelines on tuberculosis. Module 5: management of tuberculosis in children and adolescents. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO

12 M4- Treatment care & support 22 WHO consolidated guidelines on tuberculosis. Module 4: treatment. Tuberculosis care and support. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO

13 M1 TB prevention 2020 WHO consolidated guidelines on tuberculosis. Module 1: prevention – tuberculosis preventive treatment. Geneva: World Health Organization; 2020. Licence: CC BY-NC-SA 3.0 IGO

14 M1 2020 WHO consolidated guidelines on tuberculosis. Module 1: prevention – tuberculosis preventive treatment. Geneva: World Health Organization; 2020. Licence: CC BY-NC-SA 3.0 IGO

15 M3-for TBI 2022 WHO consolidated guidelines on tuberculosis. Module 3: diagnosis. Tests for tuberculosis infection. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO

16 M5- childhood TB 22 (repeat)

17 WHO global lists of high burden countries for TB, multidrug/rifampicin-resistant TB (MDR/RR-TB) and TB/HIV, 2021–2025. Geneva: World Health Organization; 2021. Licence: CC BY-NCSA 3.0 IGO.

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