Meeting of the Implementation Core Group of WHO Global Task Force on Latent TB Infection and country stakeholders on implementation tools and joint TB and HIV programming to scale up TB preventive treatment

Crowne Plaza hotel, Geneva, 14–16 November 2018

Background

In March 2018, the World Health Organization (WHO) published updated and consolidated guidelines for programmatic management of latent tuberculosis (TB) infection (LTBI).[1] These guidelines recommend expansion of TB preventive treatment services beyond the target populations of people living with HIV (PLHIV) and child household contacts of TB patients, to all household contacts in high TB burden countries. They also recommend shorter preventive treatment regimens and testing options for LTBI. These recommendations complement the Political Declaration from the first ever United Nations (UN) High Level Meeting (HLM) on TB on 26 September 2018, where Member States committed to provide TB preventive treatment to at least 30 million individuals by 2022. However, in 2017, fewer than one million PLHIV (36%) and about 250 000 household contacts of TB patients (23%) received TB preventive treatment in reporting countries. Achievement of the UN HLM targets will require rapid adoption of the 2018 WHO guidelines, substantially increased funding and human resources, and nationwide coverage of TB preventive treatment services. To catalyse country efforts, WHO convened a ***meeting of the implementation Core Group of the Global LTBI Task Force and country stakeholders*** to review implementation tools and TB and HIV programming needs to achieve the UN HLM targets. The meeting was held on 14–16 November 2018 in Geneva, as part of the ***Global consultation on transition towards new and better treatments of drug resistant TB and latent TB infection***. The meeting brought together select members of the Global LTBI Task Force, and national programme managers and focal persons from 11 countries: Brazil, Cambodia, Ethiopia, Ghana, India, Kenya, Mozambique, Nigeria, South Africa, United Republic of Tanzania and Zimbabwe.

The overall objective of the meeting was to deliberate on key strategies to achieve the UN HLM target. The specific objective was to review and garner input on the draft WHO operational guidance for programmatic management of LTBI, indicators for monitoring and evaluation, and key elements for TB and HIV programming for scale-up of TB preventive treatment services in high burden countries in line with WHO recommendations in the 2018 guidelines. This report summarizes the key deliberations and specific meeting outcomes.

[1] See https://www.who.int/tb/publications/2018/latent-tuberculosis-infection/en/

Executive summary

Members of the WHO LTBI Global Task Force, country representatives, partners and civil society representatives acknowledged the opportunities offered by the first ever UN HLM on TB, held in September 2018. They also acknowledged the urgent need to use the meeting declaration to galvanize national TB responses and the scale-up of TB preventive treatment services. The 2018 consolidated and updated WHO guidelines on programmatic management of LTBI provide the policy recommendations needed to enable national planning and efforts towards achieving the UN HLM target of providing TB preventive treatment to 30 million individuals by 2022. Ministries of health should aim to achieve universal access to TB preventive treatment among populations already recommended by WHO (i.e. child household contacts of TB patients, PLHIV and clinical risk groups). Lack of provision of TB preventive treatment among these groups should be considered unethical. Prevention efforts and implementation experience should be built on, to expand TB preventive treatment among other high-risk populations. Intensified TB case finding and TB preventive treatment among PLHIV should be a standard of care, and should be included within the basic package of services for those people. Although ambitious, the UN HLM target to provide TB preventive treatment to 30 million individuals by 2022 should be considered as just the floor, not the ceiling; hence, efforts should be made to reach millions more eligible people, to end TB. Improving the reach of services requires patient-centred service delivery approaches, using all relevant service delivery portals and programmes at community level. A *family approach* may help in scaling up TB preventive treatment among household contacts of TB patients and PLHIV. Integrating these activities within other ongoing health and development programmes delivered at household level is key to expanding coverage. Meaningful engagement of civil society is also important, to enhance the acceptability of TB preventive treatment services, generate demand and mobilize resources. Ministries of health need to systematically empower civil society representatives so that they can contribute to national policy planning, development, implementation, and monitoring and evaluation. To support these efforts and launch extensive programmes, ministries of health should consider establishing or strengthening a *TB prevention unit* at national level, to steer implementation and coordinate with different stakeholders.

The meeting format encouraged in-depth discussions and sharing of experiences on key elements of programmatic management of LTBI. National TB programmes (NTPs) shared perspectives, and highlighted their challenges and planned next steps. All major technical and implementation partners and donors participated and shared commitments and strategies for working with countries towards achieving the UN HLM targets. Presentations can be found at the following link. Participants deliberated extensively and worked in groups to provide inputs on five critical aspects of TB preventive treatment services; that is, choice of interventions to scale up TB preventive treatment services, contact investigations and intensified case finding, resource needs and joint programming, monitoring and evaluation, and capacity-building and job aides. These inputs will be considered for incorporation into the WHO operational guidance on TB preventive treatment services. This report summarizes key meeting outcomes and suggestions for ministries of health, WHO, technical and implementation partners, and donors. The annexes contain specific discussions on thematic areas.

Key meeting outcomes

A. Suggestions for ministries of health and national programmes

1) Capitalize on the momentum built from the first ever UN HLM on TB, to expand TB preventive treatment services in the country by proactively engaging with leaders and high-level government officials (e.g. the *National action plan for TB elimination* being developed in Viet Nam following the UN HLM).
2) Include TB preventive treatment as a core intervention in the national strategic plan, with a clear budget to achieve nationwide coverage.
3) Strengthen the capacity of the NTP and national HIV programme in terms of resources and dedicated personnel and teams to coordinate TB preventive treatment service delivery at national and subnational levels.
4) Systematically evaluate reasons for low uptake of TB preventive treatment among PLHIV, child household contacts of TB patients and clinical risk groups and develop strategies to address issues such as reluctance of physicians, health care workers and beneficiaries to enhance coverage of TB preventive treatment.
5) Re-package or re-brand TB preventive treatment services in the country context, to enhance acceptability and mobilize resources.
6) Address fear of adverse drug events (e.g. hepatotoxicity), fear of development of drug resistance and fear of additional workload using clear and simple messages; also, use robust surveillance to manage adverse drug events.
7) Ensure availability of adequate stocks of drugs, tests and logistics for expansion and scale-up of TB preventive treatment services.
8) Develop a national business case for mobilizing adequate funding to support the following aspects of TB preventive treatment services:
    a. Stronger TB contact investigation, including investigations – for example, interferon gamma release assay (IGRA), tuberculin skin test (TST) and X-ray – as per national recommendations.
    b. Shorter rifamycin-based preventive treatment regimens, considering the higher cost of weekly rifapentine plus isoniazid for 3 months (3HP) or daily isoniazid plus rifapentine for 3 months (3RH).
    c. Human resource capacity, including positions and training.
    d. Education and empowerment of members of civil society.
    e. Advocacy, communication and social mobilization.
    f. Stronger recording and reporting; for example, through adoption of electronic tools (e.g. WHO LTBI mobile application [app]), updating of the existing electronic data system, and interlinking of data systems such as those for TB and HIV.
    g. Where national guidelines recommend, resource allocation to strengthen laboratory infrastructure, capacity of laboratory staff, and specimen collection and transportation.

h. National HIV programmes that fund intensified TB case finding, testing and TB preventive treatment among PLHIV.
i. Provision of TB preventive treatment for contacts of TB patients detected in the private sector (e.g. Kenya), including all public health functions (e.g. contact investigations, and monitoring and evaluation).

B. Suggestions for WHO, partners and donors

1) WHO and partners to garner higher level of commitment from ministries of health, and advocate for increased human and financial resources to scale up TB preventive treatment services.
2) Existing national data and evidence to be used to demonstrate the potential impact of scaling up TB preventive treatment services on TB epidemiology in the country.
3) Inclusion of preventive TB treatment to be supported as a core budgeted intervention in the national strategic plans to be updated or revised in 2019–2020.
4) WHO and partners to consider reviewing the language around TB preventive treatment (e.g. use of the term "latent TB") to help foster a sense of urgency and to encourage prioritized action.
5) WHO and partners to facilitate dialogue with manufacturers, and influence availability and pricing of TST and IGRA in countries where these are recommended, since tuberculin is currently not widely available and IGRAs are expensive. Similar dialogue should be promoted with producers of computer aided action (CAD) radiography, in countries where X-ray is recommended, to guide TB preventive treatment.
6) WHO and partners to support the development of an investment case for nationwide scale-up of TB preventive treatment services, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) and the US President's Emergency Plan for AIDS Relief (PEPFAR).
7) WHO and partners to support review of country specific targets developed by the Stop TB Partnership and suggest modification where required considering national data.
8) Donors and implementation partners to consider provision of additional funding support to boost initial scale-up of TB preventive treatment in the interim, while NTPs mobilize more domestic resources.
9) Donors and implementation partners to promote joint TB and HIV funding applications and joint programming, to enhance coverage of TB preventive treatment services.
10) WHO to develop or provide the following:
    a. Advocacy tool with clear and simple messages explaining the need for scale-up of TB preventive treatment and what steps are needed to translate the UN HLM declaration into concrete actions.
    b. Guidance for the development of an investment case (e.g. the Global Fund and PEPFAR).
    c. Guidance on selecting prioritized actions (e.g. adaptation of the screen TB tool developed by the WHO Western Pacific Regional Office).
    d. Mechanism to enable sharing of tools, job aides, algorithms, standard operating procedures and implementation experiences among global technical and implementation partners (e.g. via Dropbox).
    e. Documented best practice on implementation of TB preventive treatment services.
    f. Generic training package (in collaboration with partners) and support for country adaptation

g. Forum to convene modelers and articulate the impact of nationwide scale-up of TB preventive treatment on TB mortality and the emergence of future multidrug resistant TB (MDR-TB) or extremely drug resistant TB (XDR-TB), including a cost–benefit analysis.
h. Update of the monitoring and evaluation framework and development of indicator definitions for proposed global and national level indicators, for peer review and finalization.

Annex 1: Inputs and suggestions for WHO operational guidance

The meeting participants extensively deliberated and provided specific inputs on the outline of the draft World Health Organization (WHO) operational guidance document. They also provided inputs on various aspects of the programmatic management of latent tuberculosis (TB) infection (LTBI), including choice of interventions, household contact investigations, monitoring and evaluation, capacity-building, and the need for job aides and tools to assist national TB programmes (NTPs). This annex summarizes the key discussions and suggestions.

A. Content of the WHO operational guidance

a. WHO operational guidance should outline both the programmatic and clinical considerations in TB preventive treatment services. It should clearly describe key principles, choice of interventions, and strengths and weaknesses of different diagnosis and treatment options, to facilitate informed decision-making at national level.
b. Key programmatic considerations and tools in implementation:
    i. Development, updating or revision of national guidelines, and dissemination of those guidelines.
    ii. Definitions of index case, contacts and investigation.
    iii. Target population for TB preventive treatment.
    iv. Considerations for preventive TB treatment regimen (adults, children and people living with HIV [PLHIV] on antiretroviral therapy [ART]).
    v. Screening and diagnostic approaches.
    vi. Key stakeholders to engage with, including private sector and public sector (e.g. prisons).
    vii. Tools to assess country readiness for scale-up of TB preventive treatment services; for example, a checklist such as the KNCV Tuberculosis Foundation (KNCV) benchmarking tool for childhood TB or the tool from the Centers for Disease Control and Prevention (CDC).
    viii. Standard operating procedures (SOPs) and job aids (e.g. posters, registers and TB preventive treatment cards).
    ix. Human resource considerations (e.g. implementation cadre at facility and community level, salary, remuneration, capacity-building and mentoring).
    x. Procurement and supply chain management considerations (e.g. forecasting, procurement and monitoring of stocks, and coordination between TB and HIV programmes for quantification).
    xi. Monitoring and evaluation considerations (e.g. guiding principles for information management system, recommended key indicators, examples of recording and reporting forms, and ways to link TB preventive treatment data from different programmes).
    xii. Capacity-building of programme personnel (e.g. TB, HIV, and maternal and child health) on policy and procedures for delivery of TB preventive treatment (including disclosure counselling and literacy).

xiii. Demand-creation through community sensitization, advocacy and engagement of professional organizations.
xiv. Suggestions for and examples of enabling policy and legislative environment, how to link TB preventive treatment sservices with initiatives for finding missing TB cases and joint programming (e.g. HIV and TB programmes).
xv. Capture data on implementation through partners (e.g. US President's Emergency Plan for AIDS Relief [PEPFAR]) for national and global reporting.
xvi. Promote relevant operational research (e.g. thresholds to consider for testing for TB infection before preventive treatment, impact measurement, adverse events rates and drug resistance).

B. Guidance on choice of interventions to scale up TB preventive treatment services

1. *Target populations:* evaluation of existing national data on TB risks according to populations and clinical condition, to prioritize target populations for TB preventive treatment beyond people living with HIV (PLHIV), child household contacts of TB patients under 5 years and clinical risk groups. Household contacts of TB patients aged more than 5 years may be considered for TB preventive treatment along with other risk populations (e.g. prisoners or people who inject drugs), considering country context to achieve the United Nations (UN) High Level Meeting (HLM) targets. Contacts of multidrug resistant TB (MDR-TB) patients may also be considered, based on capacity of the NTPs.
2. *Implementation approach*: Either a public health approach or an individualized approach may be considered in scale-up of TB preventive treatment. With a *public health approach*, TB preventive treatment may be started after active TB is ruled out clinically. It may also be considered when the risk of LTBI is high or when it is either not affordable or not feasible to provide testing for TB infection. This approach may be considered in the short term but testing services should gradually be expanded. The *individualized approach* may be considered when resources and health systems capacity in the country allow for testing for TB infection before preventive treatment – an approach that is currently practiced in high-income countries.
3. *Treatment regimen*:
    a. A shorter regimen is preferable to daily isoniazid for 6 months (6H) or for 36 months (36H).
    b. Use of a single regimen for different target populations is preferable to multiple options.
    c. Rifamycin-based shorter TB preventive treatment regimens show better treatment completion rates and lower rates of adverse events than longer regimens.
    d. The treatment regimen in children should be considered strategically, and an existing treatment option should be promoted (e.g. daily isoniazid plus rifapentine for 3 months [3RH]) until child-friendly formulations for weekly rifapentine/isoniazid for 3 months (3HP) become available, to avoid slowing down progress.
4. *Testing for TB infection before preventive treatment*:
    a. LTBI testing before treatment should be considered as standard care, although it is not required among PLHIV and child household contacts aged under 5 years.

b. A pragmatic approach is necessary, taking into account the country context, for selecting a test for TB infection. For example, the interferon gamma release assay (IGRA) is a good test, but interpretation of results can be challenging in programme settings, and there is a need for skilled staff to draw and transport blood within a specified period. The tuberculin skin test (TST) is less expensive but administering the test and reading the test results can be operationally challenging.

c. Lessons should be drawn from experience of rollout of other complex health technologies such as Xpert MTB/Rif and viral load testing, to expand access to testing for TB infection in programme settings.

5. *Chest radiography (CXR) to identify individuals eligible for TB preventive treatment*:

   a. NTPs should continue to advocate for enhanced access to CXR as part of government commitments to universal health coverage and the UN HLM target to find 40 million TB patients by 2022.

   b. CXR may be considered among clinical risk groups and household contacts of TB patients aged more than 5 years; however, lack of CXR should not be a barrier for preventive TB treatment in child household contacts aged under 5 years and in PLHIV.

C. Strengthening household contact investigation

Achieving the global target of providing TB preventive treatment to 30 million individuals by 2022 largely depends on reaching household contacts of all notified TB patients. In turn, this requires strengthening of household contact investigation mechanisms, including clear strategies for reaching index cases and their households, and ensuring the evaluation, investigation and treatment of all contacts. The following important issues and suggestions emerged from deliberations at the meeting, for inclusion in the WHO operational guidance.

1. Mechanism for contact investigation:

   a. Based on the country context, consider either the health facility, community service provider or household contact investigation. The investigation may either be active (e.g. through visits in the community or household) or passive (e.g. through inviting contacts to the health facility via the index case); however, research has shown that the number of household contacts doubles