Executive summary

Over 130 TB, HIV and monitoring and evaluation focal points came together to review progress on (1) ART uptake for HIV infected tuberculosis patients, (2) the three I’s for TB/HIV and (3) monitoring and evaluation of TB/HIV activities in 14 African countries. These countries accounted for 70% of the TB/HIV burden worldwide in 2011. The participants represented TB and HIV from WHO AFRO region, civil society groups, members of the Core Group of the TB/HIV working group, PEPFAR and the Global Fund, STOP TB and HIV departments in Geneva and WHO, ministry of health, CDC and US government in Botswana, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Nigeria, Swaziland, Uganda, US Tanzania, Zambia and Zimbabwe.

The meeting was opened by calling for the “end of tuberculosis during our generation”, for national governments to address the need for TB/HIV program co-ordination, and for all components of society to engage in prevention, access and adherence to treatment, stigma and discrimination for the elimination of TB/HIV to become a reality. The dedication of and need to support health professionals who are themselves at risk of TB and HIV in the course of their work was emphasised.

The workshop served as an important forum to share new data, best practices and debate key programmatic and operational issues. Important conclusions were that:

- TB/HIV programs need to go beyond collaboration and strive for better integration of services and programmes at all levels
- There is an urgent need for programs to increase rates of timely ART initiation for persons diagnosed with TB who are co-infected with HIV
- Adoption of key policies and advocacy for their implementation (e.g. scale up of IPT) are essential to the success of national TB/HIV efforts
- Better TB/HIV data are needed (particularly on mortality and disease burden) together with simplified and streamlined strategies to collect, analyze and act upon reports
- At the global level, more effort is needed to harmonize and simplify reporting requirements
- Engagement of all stakeholders (civil society, researchers, donors and policymakers) is critical to the successful control of TB/HIV
- Countries were encouraged to be more ambitious with their Global Fund applications to help to meet the funding gap
The State of the TB/HIV Epidemic Globally and in the African Region

Globally, operational challenges hamper the uptake and hence impact of evidence-based strategies and guidelines for TB/HIV. Significant numbers of patients being lost along the TB/HIV cascade of care moving from TB diagnosis to TB treatment success and retention in HIV care.

The African region carries the highest burden of TB/HIV worldwide, and the loss of patients along the TB/HIV cascade is most apparent in this region. Key strategies were suggested to ensure that all PLHIV and TB get the treatment they need.

Globally there is a need to:

- Expand new diagnostics and case finding
- Link to TB/HIV care and start ART
- Retain and transition TB/HIV patients to chronic HIV care need to be developed and initiated

These activities should be accelerated by applying the evidence and setting up systems that respond to community needs.

At regional and country levels, strategies should focus on:

- Creating a movement to operationalize universal health coverage for TB/HIV services
- Facilitating policy review of HIV and TB guidelines in high HIV & TB burden African countries to align with current recommendations and opportunities
- Implementing and enforcing accountability frameworks (monitoring and evaluation)

Universal Access to ART for HIV-Infected TB Patients

Inequity in access to ART for people living with HIV who have active TB persists: in 2011 58% of all eligible PLHIV worldwide were provided ART compared to 48% of TB patients co-infected with HIV. Data from CROI 2013 show that significant numbers of people with HIV are still dying with undiagnosed TB (between 21% and 52% of cadavers of adults with HIV were diagnosed with TB at autopsy). WHO recommends that all HIV infected TB patients should be commenced on ART regardless of their CD4 counts. In some countries which were represented at this meeting however, policies for HIV infected TB patients still require that ART initiation is delayed until CD4 counts are available.

Innovative models of delivery which helped to increase ART uptake were shared. Mozambique has significantly increased ART coverage in co-infected patients (from 29% up to 55% between 2011 and 2012). They plan to further improve access to and retention on ART by integrating community-based DOTS and the community support adherence group (traditionally an HIV activity), to provide a “one stop” model for TB/HIV in all facilities providing ART. HIV care and treatment services are being offered at TB clinics in Tanzania. Malawi has adopted option B+ in which all pregnant women are being treated with ART at MCH services. In Namibia, integrating maternal, neonatal and child health (MNCH) and TB/HIV services was associated with a general ART coverage of 85%. The coverage among HIV positive TB
patients was 71% as a result of this integration. This shift towards integration of services which are more easily accessible to PLHIV is actively being pursued by many countries in the region.

Decentralization and integration of services requires dedication to task-shifting. This is inhibited by poor distribution and frequent migration of health care workers requiring constant training in the context of insufficient training facilities, and the lack of reliable supply chains.

Concerns that nurses may not be as efficacious at providing ART services as doctors was dispelled somewhat by evidence presented that the time to treatment, virologic toxicity and liver function failure was similar for patients initiated on ART by doctors and nurses. In addition, despite similar mortality rates for patients initiated on ART by health officers and nurses at health centres, half were lost to follow-up, more were retained in treatment, and the median CD4 count at starting ART was higher when compared to and hospital physicians.

**Key action points for increasing ART uptake:**

- Immediate adoption of the policy of starting ART for all TB patients within 2-8 weeks regardless of CD4 count.
- Integrate and decentralize TB/HIV services through task-shifting, capacity building, laboratory strengthening and engaging the private sector and community members.
- Establish processes and specific funding sources which enable the translation of policy to practice (dissemination, joint supervision, training and mentoring, monitoring and evaluation of the policy with nationally defined program goals).
- Address specific concerns of health workers with appropriate evidence (e.g., IRIS is usually self-limiting).

**TB Infection Control - Protecting vulnerable populations**

Lack of (1) standard operating procedures, (2) simple tools to assess risk, (3) facility-based “Champions” for TB Infection Control (TBIC) and (4) adequate training are barriers to the effective implementation of infection control procedures in resource-poor settings. The CDCs TBIC Implementation package and Botswana’s New Model for TBIC have had early successes in the implementation of TBIC practices.

Political advocacy, pooling of resources from various partners for specific IC activities and the introduction of facility based infection control committees are effective strategies for the development and implementation an effective TB infection control policies in resource-poor settings. Addressing poor knowledge of infection control practices can be improved by incorporating TBIC issues into national training processes. Commitment to guidelines for the control of TB in prisons, combined with decongesting cells and the promotion of TB/HIV isolation cells have had significant impact on reducing HIV related TB where TB prevalence can be 10-20 times that of the general population.
Key action points to improve TB infection control:

There was general acceptance of the need to adopt and adapt TB infection control guidelines across health facilities and key congregate settings such as prisons and mines. Specific points of action were:

- Foster political commitment to TB infection control policy
- Improve accountability and responsibility for specific TBIC activities at facility level by promoting the delegation of specific activities to specific personnel
- Educate and engage all stake-holders including the wider community
- Promote the regular evaluation of health facilities and congregate settings
- Improve support and surveillance of health care workers

Service Delivery Models

The challenges and opportunities presented by community based models (for example ZAMSTAR), combining TB/HIV services with MNCH and initiation and follow-up of ART by TB nurses at DOTs clinics were presented. The overriding challenge with many of the proposed models of service delivery is the lack of evidence for treatment outcomes or mortality. In general, all countries accepted that decentralization and integration of services would improve uptake, retention and coverage of TBHIV services however no one model fits all.

Key action points for service delivery models:

- Tailor services so that they are based on facility infrastructure and distribution, staffing levels and competencies.
- “One-stop models” are preferable in which patients can receive all services in the same setting by the same provider.
- Promote nurse-driven models (through task shifting) and the exploration of mobile teams
- Decentralize laboratory and diagnostic services where appropriate and provide efficient links to those services from community facilities which are not able to accommodate them.

Intensified TB case finding (ICF) and Isoniazid preventive therapy (IPT)- Towards earlier identification

HIV and TB and challenges in the implementation of IPT policy

Moving beyond pilot projects to the full implementation of effective policies requires that efforts are (1) context specific (taking into account local epidemiology, resources and systems organization), (2) able to measure implementation, and (3) supervised to ensure success. ICF strategies will need to incorporate new diagnostic strategies as they emerge such as Xpert MTB/Rif, urine LAM and digital radiography with computer-assisted diagnosis. Community-based efforts (such as the ZAMSTAR Project) have highlighted that integrated household approaches are likely to be the best strategy for both TB and HIV case finding.

National policy dialogue can result in the revision and successful scale up of IPT services (For example, South Africa). Botswana’s experience with Xpert MTB/Rif rollout and plans for a national evaluation, and Kenya’s community-based case finding, contact tracing and follow-up support program were presented.
Concerns were raised over the number of TB cases missed with the TB screening tool, and the implications that this could have for the development of MDR-TB if PLHIV with asymptomatic TB disease are erroneously commenced on isoniazid. Panel members clarified that the risk of asymptomatic TB is low (10%) and hence the risk of isoniazid resistance unlikely.

Discussions around ICF focused upon overcoming operational difficulties in the roll-out of Xpert MTB/Rif. Although this is promoted as being suitable for use outside the laboratory, the absence of reliable electricity sources, and of facilities to store specimens waiting to be processed, limit its use in the community. Although the urine-LAM test has poor sensitivity in outpatient settings, it is more efficacious for TB detection of patients with low CD4 counts and disseminated TB and so more suited to case detection in in-patient settings.

In Kenya, the success and sustainability of the community-based project depended on the fact that community health workers were chosen from within the community through a community consultation process which was repeated when the worker left to take on another role. Local incentives were in place, and the role was held in high esteem.

**Key action points for ICF were:**

- To provide TB screening education at school and disseminate to key community members (e.g. pharmacies, traditional healers)
- Screen household contacts
- Integrate ICF into all HIV service delivery points.
- Develop a system/registry for collecting ICF data to enable follow-up
- Symptom screening should be supported with new technology (such as Xpert MTB/Rif and digital Xray) where feasible
- Strengthen referral and linkage system between TB, HIV, PMTCT programs and the laboratory

**Key action points for increasing IPT uptake were to:**

- Develop and define a country-specific IPT implementation package
- Integrate TB/HIV training into mainstream training to generate demand
- Empower patients with information
- Build program capacity (logistics and technical) to implement IPT
- Improve IPT surveillance and report on indicators.

**Monitoring and Evaluation- How well are we doing? Capturing data to improve services**

Poor data quality, poor understanding of key issues (such as cohort analysis, indicator definitions, and different time periods), and lack of coordination among TB and HIV programs and donors limit the ability to plan accurately for TB/HIV activities at global and national levels. Improving the understanding of TB disease burden, better TB epidemiology (such as disaggregated data) and investing in M&E systems will improve the chances of success of funding applications within the Global Fund’s new funding model.
The difficulties with developing and utilizing monitoring and evaluation tools within an evolving policy environment were shared by Uganda and Ethiopia.

Through discussion country participants highlighted the many challenges (including lack of forms and health workers not being trained to collect data) but also the need for better harmonization at the global level to reduce the burden of reporting and duplication.

Specific action points for improving monitoring and evaluation systems were:

- Better TB/HIV data are needed (particularly on mortality and disease burden) together with simplified and streamlined strategies to collect and review
- At the global level, more effort is needed to harmonize and simplify reporting requirements
- Increased country ownership and linkage to research agenda at country level
- TB and HIV programmes, together with key stakeholders, should work at country level to ensure completeness of reporting, data quality, and use for program management
- Engagement, training and feedback to the health care workers who collect data

Effective Partnerships

The AIDS & Rights Alliance for Southern Africa (ARASA) provided a civil society perspective on effective partnerships, highlighting the need for a participatory approach that avoids scientific jargon, the ongoing need for greater TB/HIV integration and advocacy, and some examples of ARASA’s work to educate communities on TB/HIV and the 3 I’s. The Consortium to Respond Effectively to the Aids/TB Epidemic (CREATE) addressed the role of the research community, which is critical to answering key disease-specific and programmatic issues, and the need for operational research to close the gap between knowledge and practice and the need to build research capacity at the local level to answer key questions. The Global Fund’s new funding model is moving towards requests based on the national strategies and those that engage all stakeholders (including communities) have the best guarantee for success. The strong TB/HIV component of PEPFAR’s Blueprint for creating an AIDS-Free Generation was presented and the importance of synergies and collaboration between PEPFAR and Global Fund was emphasized.

The agenda and presentations for this meeting are available at: