Accelerating scale up of MDR-TB treatment in TB CARE countries

March 4-5, 2013, University Research Co., LLC, Bethesda, Maryland

Objectives

- 1. To identify the bottlenecks to increasing the number of MDR-TB patients in treatment in four TB CARE countries
- 2. To discuss specific TB CARE activities that can address these bottlenecks.

Summary

The two-day meeting focused on four countries: Nigeria, Uzbekistan, Bangladesh, Indonesia. These countries were chosen because they have high burdens of MDR-TB and face large gaps in diagnosis and treatment of MDR-TB. All four countries receive significant TB CARE support in the area of MDR-TB.

- Nigeria (Tushar Kanti Ray)
- Uzbekistan (Sharaf Yuldashev)
- Bangladesh (Paul Daru)
- Indonesia (Akhtar Muhammud)

Recommendations

Nigeria

- Rapidly endorse and implement ambulatory MDR-TB treatment policy and services. National guidelines call for hospital-based care during the eight months of injectable—there are about 150 patients currently on the waiting list because of a lack of MDR-TB hospital beds. Guidelines for ambulatory care are expected to be released in the fall of 2013. Draw lessons from HIV/AIDS program in retaining and supporting patients on ART for adherence and social support.
- Include and promote community-based care in ambulatory MDR-TB treatment policy and practice. The draft guidelines for ambulatory MDR-TB care focus mostly on facility-based DOT, which may not be the best model for the country, particularly in rural areas.
- **Provide socioeconomic support for MDR-TB patients**. In the current system, hospitalized patients are taken care of well, but support disappears once the patient is discharged. Enablers should be incorporated as part of a comprehensive community-based TB control program.
- **Continue expanding and strengthening the laboratory capacity for diagnosis of DR-TB**. Ensure dysfunctional labs are supported and equipment is repaired (MGIT machines) and maintained.

- Support the development of a robust sputum transport system. The country is using Xpert MTB/RIF as the main strategy for MDR-TB diagnosis, which makes sense, but a strong sputum transport system will be needed because the Xpert network is still small compared to the size of the country.
- **Review standardized MDR-TB treatment regimens based on DST data.** Routinely record and collect DST data for different treatment categories (relapse, return after default, etc.) and adjust standardized regimen accordingly.
- Mobilize and support States to take responsibility (financial and managerial) for scale-up of MDR-TB diagnosis and treatment. The MDR-TB program is federal, but facilities are run by the States. At the State level, there is limited staff available to monitor and supervise the treatment given to MDR-TB patients. Patient support, supervision and training are not supported by the States.
- Strengthen supervision and monitoring of the MDR-TB program, especially for ambulatory patients. Have fully dedicated focal persons at federal and state level for PMDT coordination and support. The program is particularly weak in the ambulatory phase of treatment, after patients are discharged from the hospital. Record keeping is poor during this phase of treatment.
- Develop a costed training plan in support of expansion of Human Resources for MDRTB management. The team of trainers is too small to meet the training needs for expansion. The focus has been mostly on medical doctors, but needs to include nurses, social workers, State and LGA TB coordinators, and community health workers.
- **Revisit the PMDT scale-up plan** in line with Xpert scale-up plan and above recommendations, cost it, quantify the financial gap, and mobilize resources. Currently MOH has committed to procurement of 500 MDR-TB treatment courses. TB CARE I will procure 80 treatment courses. Ensure timely procurement to avoid lack of drugs becoming a bottleneck in scale-up.

Uzbekistan

- Expand the Xpert MTB/RIF network and use it to test all TB patients. Diagnostic algorithms stipulate that all TB patients should receive DST, but only 30% of TB patients have access to culture and DST.
- Implement the FAST strategy. FAST (with use of Xpert MTB/RIF) could help to diagnose more MDR-TB patients, as well as decrease hospital transmission, which is likely to be a serious problem due to the reliance on hospitalization.
- **Continue to advocate for socio-economic support for MDR-TB patients.** Government will want to see cost-effectiveness evidence justifying this approach. Patient support is provided now routinely through community organizations and social services. The experience from the successful TB CAP approach in Kazakhstan may be a good example of best practice (Kaliakbarova G et al. Psychosocial support improves treatment adherence among MDR-TB Patients: Experience from East Kazakhstan. In press. TOIDJ).
- Address the issue of unnecessary hospitalization of TB patients. Hospitalization of all TB patients (including MDR-TB patients) is routine and probably unnecessary in most cases. Unlike in other countries, it is not a bottleneck to scale-up because there are large numbers of hospital beds available, but this practice probably contributes to nosocomial transmission. Changing to

ambulatory treatment may result in large costs savings for the Ministry of Health, but is likely to raise much resistance from health workers employed in hospitals currently. Ambulatory treatment is already implemented by MSF in Karakalpakstan autonomous region. Also now adopted in Tashkent, but needs more promotion to other oblasts.

- Strengthen management of side effects. A downside of TB management at the Primary Health Care level is that monitoring and management of side-effects is generally poor. NTP needs to strengthen knowledge, skills and tools, including ancillary drugs.
- **Develop a costed training plan, including training of the entire decision-making cascade.** In the hierarchical system of Government, nothing happens without the consent of the higher level. It is extremely important to train the decision makers.
- Maintain close communication with Global Fund Portfolio Manager. It is critically important to synergize with the Portfolio Manager on policy and planning.

Bangladesh

- **Expand Xpert MTB/RIF at full speed.** Initial experience with Xpert MTB/RIF has been encouraging. The current Xpert expansion plan should be implemented as quickly as possible, and probably needs to be expanded further given the size of the country.
- Support improvement of a sputum transport system and incentives for health workers to diagnose MDR-TB. Xpert has been successful in increasing access to laboratory diagnosis, but health workers need to implement the diagnostic algorithm on all TB patients who qualify. Innovative incentive schemes can increase MDR-TB case finding.
- **Consider widening algorithm outside of retreatment patients.** As the Xpert network expands, more patients can be tested with it, including lower-risk patients in some areas. FAST in some pilot facilities or in some pilot districts can be one way to expand the current algorithm.
- **Continue scale-up of community care for MDR-TB.** Hospitalization capacity is still a bottleneck, so full community-based care needs to be strengthened and expanded.
- Strengthen supervision and medical monitoring of community care for MDR-TB. The weak aspect of the current community-based care system is the supervision, especially as the system continues to be decentralized. Funding is needed for a network of supervisors that can do home visits and supervise community DOT providers.
- Expand usage of the shorter "Bangladesh regimen" under WHO "trial" conditions. Bangladesh has done a good job so far to promote the use of this shorter regimen alongside the conventional regimen.
- Strengthen side-effect management. In and beyond the hospital environment SE management leaves a lot to be desired.
- Increase linkage with the private sector. The private sector manages many patients with MDR-TB.

Indonesia

• Accelerate scale-up of MDR-TB treatment centers. The number of hospitals providing for MDR-TB treatment within the countries PMDT strategy (GLC, Global Fund, TB CARE I supported), as well as diagnostic capacity has been a major bottleneck to scale-up. Ambulatory treatment is provided from

hospitals and dedicated PMDT Health Centers (Puskesmas) around an MDR-TB hospital, after patients are initially admitted for 2-3 weeks. Scale-up of Xpert MTB/RIF has been limited to those hospital laboratories which also serve as MDR-TB treatment centers. MOH has decided that it will allow expansion of Xpert MTB/RIF outside of MDR-TB treatment centers, thus increasing diagnosis of RIF resistant TB through Xpert. At the same time MDR-TB hospitals with satellite MDR-TB health centers will expand from 5 to 9 hospitals and to 235 health centers in 2013 to accommodate the treatment of the diagnosed patients.

- Investigate the low percentage (2.4%) of patients notified as re-treatment. There is likely to be a significant number of patients who are misclassified as new. More emphasis needs to be given to collecting a proper patient treatment history.
- Include Provincial Health authorities in planning and funding PMDT scale-up. Scale-up has been planned in a top-down approach, in the absence of sufficient capacity building at the level of provincial health authorities. Provinces need to support transportation of patients or laboratory samples, as well as patient support systems. Even though ambulatory guidelines have been approved, many provinces are reluctant to implement them. Each province should have a costed scale-up plan for PMDT.
- Explore true community-based MDR-TB care. A facility-based model is probably not the right one for many areas of the country. There are already a number of patients who have refused treatment because of the requirement to be hospitalized far away from their homes. This will improve with the increase in qualified hospitals, but the underlying problem is the lack of access to treatment in one's community. Engage with community-based organizations that can include the home-care for MDR-TB patients in their health program. Consider allowing 24/7 DOT services for MDR-TB to accommodate patients who work at irregular hours during the day.
- Expand the Xpert MTB/RIF network. There have been multiple problems causing the slow implementation of Xpert MTB/RIF. Rapid scale-up to 27 sites in 2013 should be a high priority, with treatment capacity following suit.
- Increase staffing for PMDT. There is not enough TB CARE I staff responsible for scaling up PMDT throughout the country. There are many areas of need, including training and supervision. There is a need to appoint a dedicated PMDT focal person in each province who will take full responsibility for supervision and M&E.
- **Expand socio-economic support for patients.** The current treatment model requires many patients to move away from their homes. At the same time, transportation reimbursement is limited only to patients who are "eligible". No food or other support is provided during the ambulatory phase.
- Work closely with the Global Fund portfolio manager. Global Fund is a major funder of the PMDT scale-up. Ensure excellent coordination between Global Fund and TB CARE I support on targets, planning and strategy.

Core activities

- **Promote community-based MDR-TB care.** Mandatory hospitalization at the beginning of treatment is still a bottleneck. The existing tools created by TB CARE need to be marketed. Furthermore, countries need guidance about the type of community-based model to implement (e.g. clinic- vs. home-based).
 - Regional meeting for Central Asian Republics on ambulatory treatment models for MDR-TB
 - PMDT Fellowship for GLC consultants
 - Disseminate best practices of community-based PMDT
- Develop tools for improving access to DST via Xpert. Xpert has become the most common strategy to expand access to DST, and has already made an impact in many countries in increasing the number of patients diagnosed with MDR-TB. As Xpert networks increase in size and complexity, additional ways to use these networks efficiently will become apparent.
 - Pilot project on universal access to DST, including patients never treated before.
 - mHealth tools for reporting of Xpert results
- Provide policy guidance on MDR-TB patient support packages. Many countries report that MDR-TB patients do not receive enough socioeconomic support despite facing economic barriers to treatment. There is a lack of consensus and reluctance by stakeholders and funders to provide this socioeconomic support.
 - Best practices for socio-economic support (e.g. Kazakhstan, Tomsk, Peru)
- Educate GFATM about PMDT. Some of the countries reported grossly inadequate treatment targets that were tied to GFATM targets. Even though GFATM does not provide technical assistance, a better understanding about basic concepts of MDR-TB epidemiology would lead to larger thinking about MDR-TB projects and targets.
 - MDR-TB strategy training for GFATM portfolio managers

Participant list (partial)

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