

# Rapid Scale-Up of New Drugs and Regimens for the Treatment of Drug-Resistant TB in Zambia

## BACKGROUND



- Zambia is among the top 30 high burden TB/HIV countries in the world with a growing number of rifampicin-resistant/multidrug-resistant (RR-/MDR-) TB cases.
- In 2017, the World Health Organization (WHO) estimated 1,300 MDR/RR-TB cases among notified pulmonary TB cases, while NTP notified 367 cases<sup>1</sup>.
- Up until 2017, MDR/RR-TB patients in Zambia could only receive treatment from two treatment centers (Lusaka University Teaching Hospital and Ndola Teaching Hospital) due to inadequate in-country capacity to manage DR-TB patients.
- To respond to the emerging problem of MDR/RR-TB and facilitate rapid scale-up of the provision of the most appropriate treatment to patients, the Ministry of Health (MoH) National TB and Leprosy Program (NTLP) adopted WHO recommendations of routine use of Xpert as first line test, use of the second-line line probe assay (SL-LPA) among patients with confirmed RR-/MDR-TB and the programmatic use of a standardized shorter treatment regimen (STR) for eligible RR-/MDR-TB patients.
- The STRs shortened treatment duration from 24 months to 9-12 months and also included the use of new and repurposed drugs.

The USAID funded Challenge TB (CTB) project played a significant role in supporting the NTLP to embark on the rapid scale-up of RR-/MDR-TB treatment in Zambia by providing a comprehensive support package to build the capacity of the program.



## OBJECTIVE



- To increase the number of diagnosed RR-/MDR-TB started on appropriate treatment through the introduction and rapid scale-up of new drugs and regimens.

<sup>1</sup> World Health Organisation (2018) Global TB Report. Geneva.

## RESPONSE



- Challenge TB supported the following activities to contribute to rapid scale up:
- Technical and logistical support towards the revision of 'Guidelines for the Programmatic Management of Drug-Resistant Tuberculosis in Zambia' to include new diagnostic algorithm, new drugs and regimens (ND&R) and active TB drug safety monitoring aDSM.
- Built capacity of MoH staff by trainings in PMDT focusing on ND&R and active TB drug safety monitoring and management (aDSM) systems using the revised guidelines through short-term technical assistance (STTA) from KNCV and The Union. A total of 124 MoH staff - clinicians, nurses and pharmacists, were trained in PMDT focusing on ND&R (78) and aDSM (46)
- Supported the establishment of a pharmacovigilance (PV) and aDSM system including development of recording and reporting tools to facilitate detection, management, and reporting of suspected or confirmed drug toxicities.
- Continued capacity building by provision of follow-on mentorship visits to selected treatment sites initiating ND&R to ensure quality of treatment service provided.
- Supported the formation and training of the National Clinical Expert Committee (CEC) to provide PMDT implementation oversight and to cascade trainings.
- Supported Provincial CEC meetings to review PMDT implementation, share experiences and review challenging patients within the Province.
- Supported training of Reference Laboratories staff in SL culture and drug susceptibility testing (DST).
- Provision of LPA platform for University Teaching Hospital TB lab to increase access to SL DST.
- Procured and distributed seven ECG machines and visual testing charts to seven provincial hospitals.

## RESULTS



During the period of project implementation (2017 till 2019):

- The number of treatment sites able to initiate patients on ND&R has been decentralized from 4 in 2017 to 30 in 2019<sup>2</sup>.
- The number of RR-/MDR-TB cases notified increased from 367 in 2017 to 726 in 2018.
- The initiation of patients on STR began in Oct-Dec 2017 with 31 patients and by June 2019, a total of 504 TB patients had been initiated on STR and 65 on Individualized treatment regimens (ITR).

## Number of Adults Started on New Shorter Treatment Regimens



### LESSONS LEARNED



- More trainings and continuous onsite mentorship to achieve a critical mass of trained staff is required to sustain the program and assure improved access and quality of RR-/MDR-TB treatment service delivery.
- There is still a need to strengthen the aDSM system through training as well as oversight on reporting of suspected and confirmed drug toxicities.
- Strengthening of the sample courier system from facilities to the reference laboratories can ensure that every confirmed RR/MDR-TB case receives LPA SL DST.

### CONCLUSION

With support from Challenge TB project, the NTLP has made tremendous strides in the provision of accessible and appropriate treatment for MDR-TB patients in Zambia.

2. Challenge TB Zambia (2019). Final Project Report. Lusaka

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