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## INTRODUCTION

- People failing DRTB regimen or having relapse/reinfection of DRTB disease constitute a very difficult to treat cohort. Regimen designing for this cohort is difficult considering exposure to newer drug and other core effective drugs.
- People treated for TB with extensive involvement are known to have persistent health impairment and premature death even after successful completion of treatment.
- A meta-analysis reports that mortality for those treated for TB was three to four times higher than that among matched controls. The adverse health effects frequently stem from the pulmonary sequelae even after successful treatment completion

Since 2016, Médecins Sans Frontières (MSF) has been providing patient centred ambulatory care using bedaquiline, delamanid & imipenem to treat drug-resistant TB (DR-TB) with complex resistance patterns.



## OBJECTIVE

**This study aimed to describe the post-treatment outcomes twelve months after successful completion of DR-TB treatment with concomitant bedaquiline, delamanid & imipenem**

## METHODOLOGY

**Study Design:** Retrospective study (routine collected data)

**Study Setting:** MSF independent clinic in Mumbai, Maharashtra

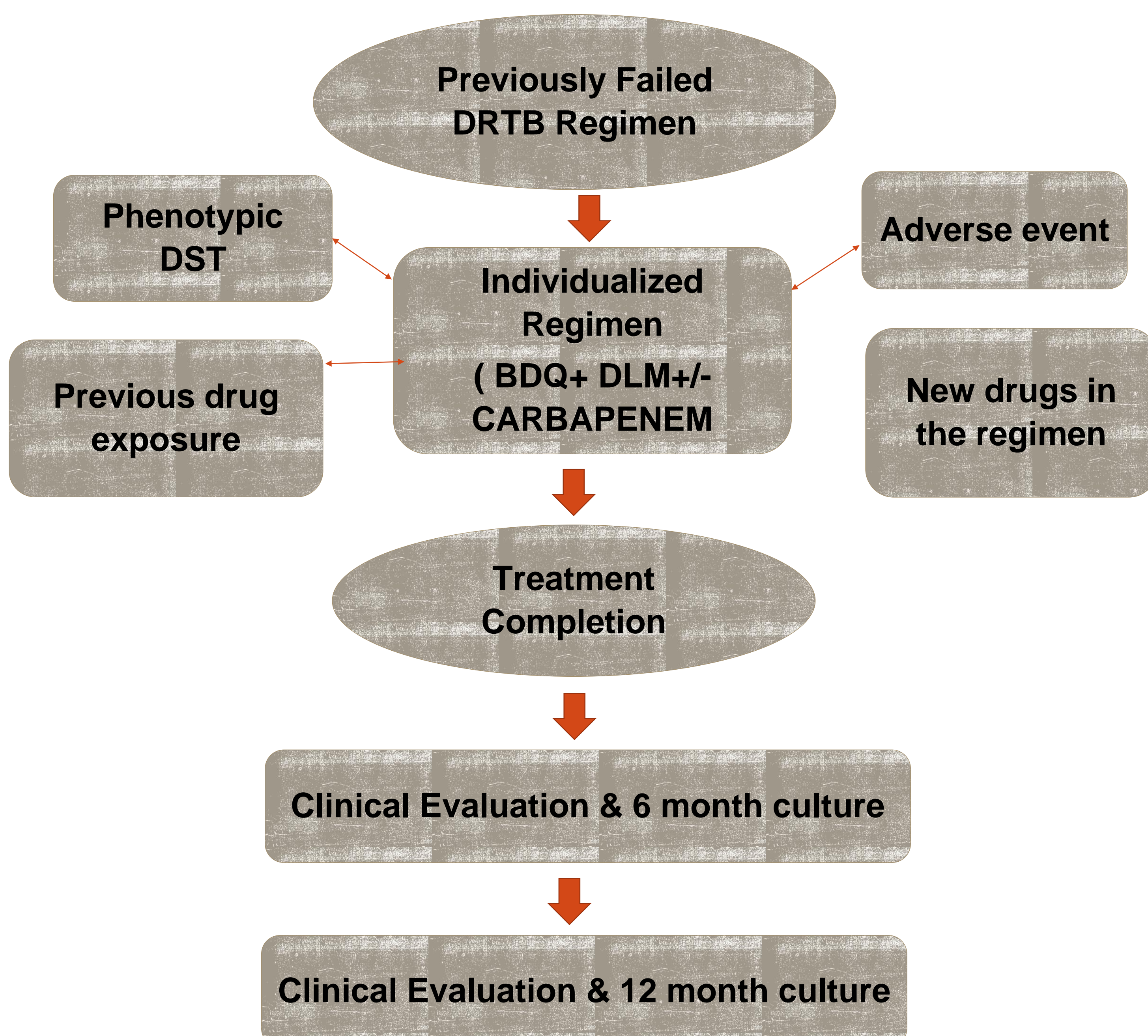
### Study Population

- Patients initiated on DR-TB treatment regimens
- Patients on concomitant bedaquiline, delamanid +/- imipenem therapy
- Patients with favorable treatment outcomes (cured/completed)

**Study Period:** January 2016 – December 2019

**Outcome Measure:** Post-treatment completion, all patients were followed-up clinically and bacteriologically at 6 and 12 months

The majority of patients in the MSF cohort have been previously treated with extensive pulmonary disease and have very few effective drugs left in their regimen.



## FINDINGS

### Six and 12 month Post treatment outcome of TB patients treated with concomitant bedaquiline and delamanid containing regimens

Follow-up parameters	6 Month follow up	12 Month follow up
Total cured or completed treatment	141	
Sustained treatment success	98 (70%)	75 (53%)
TB recurrence	2 (1.4%)	5 (3.5%)
Died	3 (2.1%)	3 (2.1%)
Lost to follow - up	38 (27%)	58 (41%)

At the 6-month post-treatment, 98 patients were followed up and assessed, with 70 evaluated through culture or X-ray and 28 clinically.

At the 12-month, post treatment, 75 patients were followed up and assessed, with 68 evaluated through culture or X-ray and 7 clinically.

## RECOMMENDATIONS

Programmatic efforts need to be encouraged for follow-up of patients for 12 months post completion of treatment. Continuous re-engagement needs to be encouraged.

TB requires major changes in attitudes and in funding of TB programmes, but has the potential to improve both treatment outcomes and the experiences of people undergoing treatment.

## CONCLUSION

- DRTB treatment failure/relapse patients can be treated with newer drugs from WHO group C (DLM & IMIPENEM)
- BDQ & DLM can be given concomitantly for extended duration in individuals with extensive resistance patterns
- Significant relapse free interval of 12 months was evident in the study group probably due to starting Carbapenem with both newer drugs BDQ & DLM which were given for the entire course of treatment duration
- Tuberculosis stigma, incomplete understanding of the TB disease vulnerability, treatment fatigue, loss of daily wage are the most common assumed reasons for high lost to follow-up

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