

Rifampicin Resistant Tuberculosis in Lesotho: Diagnosis, Treatment Initiation and Outcomes

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The Lesotho guidelines for the management of drug-resistant TB recommend initiation of patients diagnosed with rifampicin resistant (RR)-TB using Xpert MTB/RIF assay on an empiric regimen while waiting for confirmation of RR-TB and a complete drug susceptibility test results.

Review of diagnostic records between 2014 and 2016 identified 518 patients with RR-TB. Only 314 (60.6%) patients could be linked to treatment records at the Lesotho MDR hospital; 291 (92.7%) were eligible for analysis.

The median treatment delay from the availability of Xpert MTB/RIF assay result was 12 days (IQR 7-19). Only 32% (101) of patients had a documented first-line drug resistant test.

MDR-TB was detected in 56.4% of patients while 33.7% of patients had rifampicin mono-resistance. Only 7.4% of patients assessed for second-line resistance had a positive result (resistance to a fluoroquinolone).

Treatment success was 72%, death rate was 26.9%, loss to follow up was 0.7%, and 0.4 % failed treatment. Death was associated with positive or unavailable sputum smear at the end of first month of treatment (Fisher exact $p < 0.001$) and older age ($p = 0.007$).

Urgent attention needs to be given to link patients with RR-TB to care - a worldwide problem.

The association of death rate with positive sputum smear at the end of the first month of treatment should trigger individualization of treatment.