**Screening Retreatment TB Patients for Drug Resistance in Mid-West Nepal: How Well Are We Doing?**

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**Background**

Multidrug-resistant tuberculosis (MDR-TB, defined as resistance to isoniazid and rifampicin) is poorly detected in Nepal; one reason may be poor functioning of culture and drug susceptibility testing (CDST) services for retreatment tuberculosis (TB) patients.

**Methods**

This was a retrospective cohort study of retreatment TB patients and CDST performance and results. All retreatment patients diagnosed and registered as relapse, failure and RAD in the mid-west region of Nepal in the National TB Report and retreatment patients who were registered at INF-NTRC for CDST from 16 July 2011 to 15 July 2012 were included in the study. All data were collected into a structured proforma between March and September 2013. Data were double-entered into EpiData (version 3.1, EpiData Association, Odense, Denmark), and validated and analyzed using EpiData Analysis.

**Results**

Of 431 retreatment patients, 66 (15%) submitted sputum samples, of which 63 reached the CRL. Of these, 39 (62%) were culture-positive; 13 (33%) patients had MDR-TB. The CDST results of 19 patients were received back at the TB Referral Centre. The median turnaround time from sending specimens to receipt of results at the TB Referral Centre was 119 days.

**Conclusions**

Less than 10% of retreatment TB patients in mid-West Nepal had CDST results recorded, leading to the under diagnosis of MDR-TB in the region. Urgent solutions are needed to rectify this problem.

**Keywords:** central reference laboratory; culture and drug susceptibility testing; multidrug-resistant tuberculosis; Nepal; operational research; retreatment tuberculosis.