

PREVALENCE OF DRUG RESISTANT TUBERCULOSIS AMONG PATIENTS AT HIGH-RISK FOR HIV ATTENDING OUTPATIENT CLINICS IN DELHI, INDIA

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Abstract. We sought to determine tuberculosis (TB) prevalence including multidrug resistant (MDR)-TB among a cohort of high risk patients at two directly observed treatment short course (DOTS) clinics in Delhi, India. We also aimed to compare the sensitivity of acid-fast bacilli (AFB) smear tests for patients with HIV using sputum cultures as the gold standard. A cross-section study was conducted among adult patients (≥ 18 years old) with prolonged cough (greater than two weeks), night sweats, fever, and/or weight loss suspected of pulmonary TB between February and March 2006. Sputum samples were obtained and processed for 165 patients; 53 (32.1%) were culture positive for TB. Patients with TB were predominantly male (92.1%), young (median age of 32 years), and the HIV-seroprevalence was high (41.5%). In the multivariable analysis adjusted for age, HIV infection was significantly associated (POR=2.0, $p < 0.05$) with the presence of TB disease. Among *Mycobacterium tuberculosis* isolates recovered from 53 cases, 25 (47.2%) were resistant to ≥ 1 first line anti-TB drugs and 7 (13.2%) were MDR-TB. The sensitivity of AFB smears among HIV negative and positive participants was 35.5% and 18.0%, respectively. Our findings demonstrated that the sensitivity of AFB smears to detect TB among HIV positive patients was low. Additionally, we found that even in regions where population drug resistance estimates are low, sentinel surveillance of MDR-TB in high-risk populations is useful to prioritize target groups in need of additional prevention, monitoring and health outreach.

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