RESEARCH NOTE

DRUG RESISTANCE AMONG *MYCOBACTERIUM TUBERCULOSIS* ISOLATES FROM PRIVATE CLINICS AND A DOTS CENTER IN DELHI, INDIA

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Abstract. The aim of this study was to ascertain the incidence of drug resistance of Mycobacterium tuberculosis isolates from patients in Delhi, India, being treated with DOTS and in private clinics, since a large proportion of patients with tuberculosis in India seek help from private healthcare sectors. Sputum samples were collected from 60 cases of tuberculosis attending a DOTS center and 42 patients from private clinics. Of these, 35 patients from the DOTS center and 12 patients from private clinics had a second sputum sample collected following two months of therapy. The isolated *M. tuberculosis* strains were assayed for isoniazid (INH), rifampicin (RIF), streptomycin (SM) and ethambutol (EMB) susceptibility by the proportion method. The frequencies of multidrug resistance (MDR) in the *M. tuberculosis* strains obtained from those treated with DOTS and in private centers were 12.7% and 5%(p>0.5), respectively. Isolates obtained after two months of therapy showed a similar rate of MDR (12.5%) at the DOTS center. although the number of patients followed-up at the private centers was small, none of these had MDR after two months of therapy. Future studies including a larger number of patients at private centers are needed to further evaluate the prevalence of drug resistance in *M. tuberculosis* from private clinics.

Keywords: M. tuberculosis, drug resistance profiling, India

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