Epidemiology of Drug-resistant Tuberculosis, A Five Year Review

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Objective: To evaluate the prevalence of multidrug-resistant tuberculosis (MDR TB) and to define its common resistance profile.

Design: A Retrospective Study.

Setting: Ministry of Health, Bahrain.

Method: All cases of clinically diagnosed TB between January 2014 and December 2018 were included in the study. Patients with positive culture were included for further analysis based on the results of phenotypic drug susceptibility to first-line anti-tuberculous drugs. Results of molecular testing Mycobacterium Tuberculosis Polymerase Chain Reaction (MTB PCR) and rifampicin-resistant gene were included in the analysis. All data were retrieved form the national public health data system and public health reference laboratory.

Result: During the study period, the incidence of TB in Bahrain decreased from 17 per 100,000 population in 2014 to 11 per 100,000 population in 2018. A total of 946 patients were diagnosed as TB, out of which, 588 (59%) had confirmed positive culture of MTB.

MDR TB was identified among 15 (3%) out of the 588 positive isolates. Isoniazid monoresistant was the most predominant resistant pattern among our population, it accounted for 53 (9%) among all tested isolates.

Conclusion: Incidence of MTB in Bahrain is decreasing. The MDR TB rate is comparable to other reported data from developed countries.

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