ANALYSIS AND SURVEILLANCE OF DRUG-RESISTANT MYCOBACTERIUM TUBERCULOSIS IN LIANYUNGAN COUNTY, CHINA

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Abstract. Drug-resistant tuberculosis (TB) has raised major global health concern. A lack of relevant information on frequency of Mycobacterium tuberculosis drug-resistant gene mutations has been a critical issue in China. The study determined epidemiology and drug resistance profiles of M. tuberculosis in Lianyungang County, China from 1 January 2014 to 31 December 2016 using specimens from the Tuberculosis Prevention and Control Agency, Lianyungang County from men (n = 1017) and women (n = 290), majority being 21-30 years of age. Overall resistance rate to four anti-TB drugs (isoniazid, kanamycin, ofloxacin, rifampicin) was 16.1%, with multidrug-resistant tuberculosis prevalence of initially treated patients of 19% and of retreated patients of 33%. Males and subjects in the younger (21-30 years of age) and older (62-70 years of age) age groups had the highest frequency of TB. Total drug resistance of M. tuberculosis showed a decreasing trend from 2014 to 2016. These findings can be used as reference baselines for future research on TB drug resistance.

Keywords: Mycobacterium tuberculosis, China, drug resistance, epidemiology, tuberculosis.