CLINICAL CHARACTERISTICS AND TREATMENT OUTCOMES AMONG PATIENTS WITH TUBERCULOSIS IN BANGKOK AND NONTHABURI, THAILAND

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Abstract. Tuberculosis (TB) is a public health problem in many large cities. We retrospectively studied the clinical characteristics and treatment outcomes of patients with active TB at 6 hospitals in Bangkok and Nonthaburi, Thailand during 2008-2009. Eight hundred thirteen patients were included in the study. The mean age of subjects ±SD was 41±14 years and mean body weight ±SD was 53±11 kilograms. The three leading co-morbid conditions were HIV infection (40%), diabetes (6%) and chronic liver disease (2%). Two-thirds of subjects had isolated pulmonary TB. Isoniazid, rifampicin and multi-drug resistance were seen in 13, 7 and 5%, respectively. After 1 year, 52% were cured or completed treatment, 19% transferred out, 12% defaulted, 9% were still on-going TB treatment, 7% had died and 1% had failed treatment. Survival rates at 2, 6 and 12 months were 93, 85 and 81% among HIV seropositive subjects; 96, 94 and 92% among HIV seronegative subjects and 98, 97 and 97% among subjects with unknown HIV status (p <0.001). On multivariate analysis, death was associated with: TB/HIV co-infection (HR 2.8; 95%CI 1.6-5.0), low body weight (HR 1.6; 95%CI 1.2-2.3), being elderly (HR 1.4; 95%CI 1.1-1.8) and having extrapulmonary/disseminated TB (HR 2.2; 95%CI 1.1-4.2). HIV infection and diabetes were the most common co-morbidities among TB subjects in our study. The percent of patients with unfavorable outcomes was relatively high, particularly among HIV co-infected and elderly subjects. Further effort needs to be made to improve these unfavorable TB outcomes in Nonthaburi and Bangkok, Thailand.

Keywords: tuberculosis, treatment outcome, survival rate, HIV, Thailand