

MULTIDRUG-RESISTANT TB AND HIV IN THAILAND: OVERLAPPING, BUT NOT INDEPENDENTLY ASSOCIATED, RISK FACTORS

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Abstract. The HIV and multi-drug resistant tuberculosis (MDR-TB) epidemics are closely linked. In Thailand as part of a sentinel surveillance system, we collected data prospectively about pulmonary TB cases treated in public clinics. A subset of HIV-infected TB patients identified through this system had additional data collected for a research study. We conducted multivariate analysis to identify factors associated with MDR-TB. Of 10,428 TB patients, 2,376 (23%) were HIV-infected; 145 (1%) had MDR-TB. Of the MDR-TB cases, 52 (37%) were HIV-infected. Independent risk factors for MDR-TB included age 18-29 years old, male sex, and previous TB treatment, but not HIV infection. Among new patients, having an injection drug use history was a risk factor for MDR-TB. Of 539 HIV-infected TB patients in the research study, MDR-TB was diagnosed in 19 (4%); the only significant risk factors were previous TB treatment and previous hepatitis. In Thailand, HIV is common among MDR-TB patients, but is not an independent risk factor for MDR-TB. Populations at high risk for HIV—young adults, men, injection drug users – should be prioritized for drug susceptibility testing.

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