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| Thesis Title       | The Epidemiological study on<br>initial drug resistance of<br>mycobacterium tuberculosis<br>from TB. Division Thailand<br>and the Anti-tuberculosis<br>Association of Thailand<br>under the Patronage of His<br>Majesty the King |
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#### ABSTRACT

A cross-sectional study for initial drug resistant strains for mycobacterium tuberculosis was performed during February to July 1986 by means of interrogation through new patients with sputum positive for tubercle bacilli who has no history of previous

treatment for tuberculosis. The study were done at the chest clinic of the tuberculosis division and at some zonal tuberculosis centres up country as well as at The Anti-tuberculosis Association Hospital in Bangkok. The total number of patient involved in the study were 1,160 newly diagnosed untreated cases. The incidence of total resistance was 16.48%. 12.8 were resist to one drug while 3.17, 0.34% and 0.17% were resist to two, three and six drugs respectively. The multi-resistance to four and five drugs were not found.

The total initial drugs resistance occurred at 6.6% to SM, 11.6% to INH, 1.0% to EMB, 1.6% to RMP, 0.4% to KM and 0.3% to CS respectively.

At 0.05 level of significance of risk factor namely, the history of migration. The history of tuberculosis in the households and their previous treatment for tuberculosis, the Coincidence of diabetes melletus as well as the history of BCG. vaccination, the cavity lesion in the lung and the duration of patient's delayed time were not associate with the initial drug resistnace. There are no significant different for the initial drug resistance for the patient in the rural and urban areas, and also for the characteristic of the population namely age sex weight race and religions etc.

The cohort analysis for 448 patients from Anti-tuberculosis hospital showed the high risk of drug resistance for the irregular patient at 23.1% the

resistance rate increase correlately to the increasion  
of the time of default. The high resistance groups  
found in failure treatment and the relapes groups.  
Good combinations of the regimen decrease the risk of  
the resistance rate.