

Pattern of Tuberculosis in Malaysia

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In 2015, the WHO reported that there were an estimated 10.4 million new TB cases worldwide, of which 5.9 million (56%) were among men, 3.5 million (34%) among women and 1.0 million (10%) among children. People living with HIV accounted for 1.2 million (11%) of all new TB cases. About one-third of the world's population has latent TB, which means people have been infected by TB bacteria but are not (yet) ill with the disease and cannot transmit the disease. These people with latent TB can get active TB disease if their immune system is low or if they are taking any treatment that can suppress their immune system.

Malaysia is classified as a country with an intermediate TB burden, that is, notification rate for TB of 81 cases per 100,000 populations in 2016. Number of TB cases notified in 2016 is around 24,000. Of these cases, 62% were sputum positive, 21% smear negative and 13% extra-pulmonary TB cases. TB lymph node and pleural effusion are common extra-pulmonary presentations. Three states with high TB cases are Sabah, Selangor and Sarawak, making up a total of almost 50% of all new cases in Malaysia.

In Malaysia and many other countries, sputum smear microscopy is still used to diagnose TB. Trained laboratory technicians look at sputum samples under a microscope to see if TB bacteria are present. Microscopy detects only half the number of TB cases and it depends on the quality of the sputum produced by the patients. Up to 40% of active TB cases can be missed if the sputum is used alone to diagnose. To complement this, a chest x ray may be required for all patients with symptoms of active TB. New technologies like fluorescent microscopy and a rapid test called Gene Xpert MTB/RIF®, been recommended by WHO.

In 2016 there were 1,696 TB deaths reported (excluding TB/HIV mortality), giving rise to 5.56 TB deaths per 100,000 populations. This TB death rate is the highest among all infectious diseases, including dengue, HIV and malaria. The age group commonly affected are above 35 years (62%) and it's always high in the elderly with other co morbid diseases like diabetes, smoking and kidney diseases.

TB is a treatable and curable disease. Active, drug-susceptible TB disease is treated with a standard 6 month course of 4 antimicrobial drugs. Without treatment adherence, the disease cannot be cured and can spread to the others and may even develop into MDR-TB. The vast majority of TB cases can be cured when medicines are provided and taken properly. Thus early detection and effective treatment can prevent TB deaths in Malaysia and all over the world.