

## **INTRODUCTION**

Tuberculosis (TB) is one of the most prevalent respiratory disease all over the world that can be life threatening if not treated correctly. The registered number of new cases of tuberculosis world wide roughly correlates with economic condition. The highest incidence are seen in those countries of Africa, Asia and Latin America. WHO estimates that, eight millions people get TB every year and estimates 3 millions people die from TB every year. In well developed countries , the steady drop in TB incidence began to decrease in the mid - 1980 and then began to increase. This rise can be at least partially attributed to a high rate of immigration from countries with high incidence of TB. Another reason is HIV - infection. That has a great influences in rising the incidences of TB, one in ten per year will develop active TB among patients HIV infection (**WHO, 2004** ).

A Final factor contributing to rising incidence of TB , is the emergence of multi - drug resistance strains. Which attributed to the special nature of *Mycobacterium - tuberculosis* , that characterized by the slow - growth rate, slow multiplication and their intracellular location, this make Mycobacteria drug resistant, so, drug administration must be used for a longer period of time than in other infectious disease. Antituberculous drugs are categorized into first line e.g (Ethambutol, Streptomycin, Isoniazid, Rifampicin and Pyrazinamide) and second line e.g (Ethionamide, Aminosalycic acid..... etc ). Both the first line and second line drugs causes certain adverse reaction must be a major consideration in drug. selection for example, Hepatotoxicity, Nephrotoxicity and Hyperuricaemia (**American Thoracic Society Documents, 2002**).