REVISED NATIONAL TUBERCULOSIS CONTROL PROGRAMME (RNTCP)

Tuberculosis, well known as TB, Yakshma, Kshaya of Tapedik in the community is a disease known since ages and referred as " Rajyakshma" or "Rajrog" in the ancient Indian medical literatures. It mainly affects lungs, but can affect any part of body. Little was known about the Pathogenesis and communicability of the disease before the 18th century.

The world changed on the evening of 24th March 1882, when German physician Robert Koch, working over decades onto the disease, read his paper in the Physiological Society of Germany in Berlin. He stated 1 /7th of all human being in world die of Tuberculosis. It is an infectious disease caused by bacteria and gave details about the presence of bacilli in the sputum of infected patient.

Tuberculosis (TB) is a disease caused by bacteria called as Mycobacterium Tuberculosis. TB spreads through droplet infection. As no drug or combinations of drugs were effective against TB till middle of the 20th century, the main line of treatment was good food, open air and dry climate in sanatoria. Streptomycin, the first antibiotic which showed anti- Tuberculosis effect, was discovered in 1943 by Dr. Selman A Waksmam, later a series of antibiotics viz. Isoniazid, PAS, Pyrazinamide, Ethambutol, Thiaciteazone and Rifampicin were discovered and were used in the TB treatment and are still in use. The latest molecule which has shown promising effect against TB bacilli is 'Bedaquiline'.

Despite of all these developments till today, Tuberculosis is still a major public health problem. Every day more than 900 people die of TB (2 people per 3min die due to TB in our country). High mortality especially among socio-economically productive age group causes huge economic losses to the society and country.

The Tuberculosis (TB) burden in India is staggering. About 40% of the adult population of the country is estimated to be infected with Mycobacterium Tuberculosis. Every year nearly 2.2 million new TB cases occur, of which nearly 0.8 million are infectious (Smear positive pulmonary). Once infected, an individual has on average a 10% life-time risk of developing TB disease. India has more people with active TB Disease than any other country in the world accounting for 26% of the global TB Burden. Also, an estimated 2.34 million individuals in India are now living with HIV/AIDS. With HIV Infection to active disease, the potential impact of the HIV epidemic on TB control in India is large.

National TB Control Programme (NTP) was implemented from 1962 to 1998. However, it had limited success with only 30-40% treatment completion rate amongst patients put on treatment. Government of India started Revised National Tuberculosis Programme (RNTCP) with Directly Observed Treatment – Short Course (DOTS) strategy, since 1998.

India's TB control programme is on track as far as reduction in disease burden is concerned. There is 42% reduction in TB mortality rate by 2015 as compared to 1990 level. Similarly there is 51% reduction in TB prevalence rate by 2015 as compared to 1990 level.

In the 12th 5 year plan, the programme has entered an ambitious National strategic plan (NSP) with a theme of "Universal Access" for quality diagnosis and treatment for all

TB patients in the community with a target of "Reaching the Unreached". This envisages early and complete detection of all TB, including the vulnerable and marginalized population and greater engagement with private sector.

It is estimated that 2.8 percent of new TB patients in India and 15 percent of those previously treated are estimated to have drug-resistant TB. However, the last survey for MDR-TB was conducted in 2009 and these estimates may no longer be applicable. National Drug Resistant Survey is currently underway to estimate the DRTB burden. Extensively drug-resistant (XDR) TB has been identified in 105 countries, including India; on an average, among those with MDR-TB globally, 9.7 percent are estimated to have XDR-TB.

The Standards for Tuberculosis Care in India (STCI) is developed, published and disseminated by the Central TB Division (CTD), Government of India, in 2014. These standards apply to all health care providers in the country, both public and private, and establish a common yardstick for TB management.