TUBERCULOSIS: CURRENT TRENDS

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"At the midpoint of the 20th century, tuberculosis was recognised by all as the "White Plague", undeniably the most dreaded enemy of the human race by any measure........... None of us-myself included-believed that its control could be attained by medical means within this 20th century" - *H. Corwin Hinshaw*

Tuberculosis (TB) is a global public health problem. As per the Global TB report of the World Health Organization (WHO) 2014, in the year 2013, an estimated 9 million people developed TB and 1.5 million died from the disease; 360,000 of whom were HIV-positive. India accounts for 20% of world TB burden. Till the 1940s there was no cure for TB. With the discovery of anti-TB drugs from the 1940s, this gloomy scenario changed and by the late 1970s it was felt that TB was at the verge of being conquered. The emergence of the human immunodeficiency virus (HIV) infection and the acquired immunodeficiency syndrome (AIDS) pandemic had led to a resurgence of TB world over. IN 1993, the WHO had declared TB to be a 'global emergency' the first time for any disease to be categorized in that fashion. The 1990s and the period thereafter has also witnessed the global emergence of multidrugresistant TB (MDR-TB). By the later part of 2000s global occurrence of extensively drug-resistant TB (XDR-TB) has been documented. Tis prompted global anti-TB drug-resistance surveillance. The HIV/AIDS pandemic, X/MDR-TB, newer risk factors like tobacco smoking, diabetes mellitus are all converging and threatening to destabilize TB control world over. The gloomy prospect of returning to the pre-anibiotic era of untreatable TB appears to be a possibility if urgent control measures are not implemented.

India was the first country in the world to start a national programme for control of TB – the National Tuberculosis Programme (NTP). By recognizing the failure of the NTP is controlling TB, the Government of India initiated the Revised National Tuberculosis Control Programme (RNTCP) that covered the entire country by March 24, 2006. The RNTCP that implements the 5-component DOTS is the sheet anchor for TB control in India. The RNTCP also provides diagnostic services and X/MDR-TB under the DOTS-Plus treatment for programme. Involvement of medical colleges in TB control, first started in India in the entire world, is also another unique intervention by the RNTCP.

Inspite of focused efforts at global TB control, TB remains one of the world's deadliest communicable diseases. The WHO global TB report 2014 indicates that the 2015 Millennium Development Goal (MDG) of halting and reversing TB incidence has been achieved globally, in all six WHO regions and in most of the 22 high TB burden countries. Worldwide, TB incidence fell at an average rate of about 1.5% per year during the period 2000 and 2013. TB mortality rate world over has fallen by an estimated 45% between 1990 and 2013.

There is a still a lot to be achieved in TB control in India. There is a need to enhance the laboratory capacity for diagnosis of drug-resistant TB (DR-TB). Point-of care diagnostic tests for early diagnosis of DR-TB should have wider accessibility. The quest for newer anti-TB drugs and newer, shorter treatment regimens is also ongoing. Clinicians and program managers should not get complacent but relentlessly pursue the goal of TB elimination.