Programmatic Management of M/X DR-TB in India: constraints and solutions - Dr Rupak Singla

According to 2009 WHO report in India 1.96 million new TB cases occurred annually in 2007. As per forth report of Global Project Anti-TB drug resistance in World in 2006 there were around 1,10,000 new cases of MDR-TB in India. In 2007 around 1,33,000 new cases of MDR-TB emerged in India. Drug resistance surveillance studies in India observed MDR-TB in new TB cases ~3% and in previously treated cases is 12%-17%. An urgent need was felt to manage MDR-TB cases under national programme in India. A National level DOTS-Plus Committee was established in 2005 to develop guidelines for the management of MDR-TB cases. The DOTS-Plus Guidelines were developed in 2006. First MDR-TB diagnostic services were initiated in two states in March 2007. First MDR-TB patients were initiated on second line treatment in August, 2007.

At present under the DOTS Plus programme the diagnosis is done using solid LJ culture media. This takes minimum 3-4 months for obtaining the Drug susceptibility results. There are very few accredited laboratories in the country to carry our DST against first line anti-TB drugs. At present only one laboratory is accredited to carry our DST against second line drugs. The DOTS Plus treatment services have been initiated in 10 states. The vision of national programme is that by 2010, DOTS Plus treatment services to be introduced in all states and by the 2013 at least 30,000 MDR cases will be put on treatment annually.

Indian Government has put up a national scale up plan to strengthen national reference laboratories and laboratory network and to develop diagnostic capacity to meet vision of providing MDR-TB diagnosis for all smear positive retreatment patients nationwide by 2012 and all new smear positive cases by 2015.

The expansion of DOTS Plus programme is facing certain challenges. There is a large and unregulated private sector and misuse of first and second line anti-TB drugs is common. There is increased burden due to TB-HIV Co-infection. There is need to maintain and further improve the quality of services across the country including scaling up culture & DST services for M/X DR-TB. Newer and rapid diagnostic tests are required for early diagnosis of M/X DR-TB in field conditions. The current methods of diagnosis take a long time during which many patients die or default and also spread infection to others in the community.

Achieving scale-up will require major strengthening of existing reference laboratories in all aspects including human resources, physical infrastructure and consumables, new technologies – liquid culture and molecular methods of diagnosis, second-line anti-TB drug susceptibility testing and technical and operational support. The molecular methods of diagnosing MDR-TB are being field tested and have already entered in demonstration phase in some of the sites.

The various constraints and solutions in the programmatic management of M/X DR-TB in India will be presented in the workshop.