

Editorial

Laboratories play an important role in the National Tuberculosis (TB) management and prevention programmes, particularly in the detection of TB cases, thus ensuring effective treatment and cure by periodic examination of sputum specimens by smear microscopy. Smear microscopy is a simple and inexpensive, yet highly sensitive tool in HIV negative cases compared to other relatively more expensive molecular biology procedures that are in vogue for detecting the disease among low burden non-endemic countries. To ensure its reliability, quality assurance apart from improvement and networking of laboratories at various levels is imperative. In addition, good quality culture & Drug Sensitivity Testing (DST) laboratories are needed to evaluate the level of drug resistance in the Region.

The SAARC TB Reference Laboratory was established with the support of the SAARC Canada Regional TB and HIV/AIDS project. One of the important components of this project was to improve the accuracy of laboratory diagnosis of respective National TB Reference Laboratories of the Region. To enable this, the SAARC TB Reference Laboratory is required to develop its capability by improving the basic infrastructure for networking all the National TB Reference Laboratories and undertaking external quality assessment programmes (EQAP) among the National TB Reference Laboratories of the Member States.

SAARC TB Reference Laboratory is involved in the panel testing scheme of Gauting Supranational TB Reference Laboratory, Germany for smear microscopy, culture and DST since 2008. Participation in the panel testing has helped to maintain the proficiency of the laboratory staff in smear microscopy, which in the long run would strengthen the SAARC TB Reference Laboratory to be able to function as the Supranational Reference Region. Similarly, the technical staff from Gauting Supranational TB Reference Laboratory frequently visit the SAARC TB Reference Laboratory for providing feedback for further upgrade. The Centre monitors and coordinates activities pertaining to prevention and control of TB in the Region through the NTPs of the Member States. SAARC TB Reference Laboratory is currently working to strengthen and support the National Reference TB Laboratories of Member States in the area of external quality assurance of sputum smear microscopy (EQASSM), Culture & DST and also to implement international bio-safety norms in laboratory procedures.

SAARC TB Reference Laboratory has been conducting external quality assurance programmes of NTRL, annually since 2003. Since then STAC has been conducting 13 rounds of proficiency testing. Analysis of these reports revealed that except in 7th round (2010) which showed a major error (High False Negative) in one NTRL all other NTRLs have provided the acceptable performance achieving 90 to 100 percent performance.

In addition, SAARC TB Reference Laboratory conducts training programs for different categories of laboratory personnel, undertakes operational research studies for early diagnosis of TB and early detection of Multi Drug Resistant (MDR) TB. Further, efforts are proposed towards pursuing research of relevance, with international laboratories and research centers. These measures would enable strengthening the diagnostic services of NTPs and obtain reliable data on drug resistance prevalent in the Region.

There are 12 National Reference Laboratories and 69 Provincial/Intermediate Laboratories in the Region performing culture and DST for Mycobacterium tuberculosis currently and many more in the pipeline. Despite the extensive laboratory networks in the SAARC Member States, there are two Supra-national Reference laboratories in the Region currently which is the National Institute for Research in Tuberculosis (Formerly-Tuberculosis Research Centre), located in Chennai, and National Institute of Tuberculosis and Respiratory Diseases New Delhi, India to support their activities. Also, there is no Supra-national Reference Laboratory for HIV in the Region. Considering the geographical size, population and burden of TB, HIV and TB-HIV co-infection in the Region, there is an urgent need to upgrade the SAARC TB Reference Laboratory as a SAARC Regional Supra Reference Laboratory. To sustain and strengthen its current activities and to fulfill the felt demand of the Region, STAC Reference Laboratory, urgently requires strengthening of its Laboratory, to meet the internationally accepted Bio-safety norms.

This would also help to provide reference services for molecular diagnostics and conducting molecular research of public health importance. It will also help to regulate Bio-safety standard in the TB and HIV testing Laboratories in the Region. The Centre also has already established the required infrastructure to become a Supra Reference Laboratory for TB and HIV and has also proven TB DST accuracy and therefore accredited by the WHO SNRL, Germany. To extend the services of SAARC TB Reference Laboratory to the SAARC Region there is an urgent need for extension of its physical and technical facilities as a Supranational TB and HIV Reference Laboratory for this Region. Hence, all Member States of SAARC have been committed for this important Regional task.