

says: *“TB is a major public health problem in the SAARC region with the burden of occurrence of more than three million TB cases each year and one million deaths... This serious situation will worsen further with TB-HIV co-infection and multi-drug resistance (MDR) TB. Recognising the already serious situation, which is reportedly worsening, in both developing and developed countries due to insufficient priority being given to TB control programmes and noting the lack of adequate political will and resources for operating effective programmes, the World Health Assembly endorsed a global TB control strategy, which is to provide adequate and efficient treatment...¹³⁶”*.

It is hardly surprising in 1998 for Dr Jagota to stress: *“TB control is likely to take long in India... It will take a minimum of three to five years before the RNTCP is implemented in the entire country. Till such time, the districts operating under NTP, specially using SCC for treatment, should be strengthened by following the guidelines¹³⁷.”* She is not alone in her concern.

5.2. The work continues

There is one refrain that emerges: NTI is a great operations research centre with an international reputation. It has now become a sleeping giant. It must awake. It must emerge stronger than before to enliven that image of olden times and to scale newer heights!

At the time of writing these lines, Dr Prabha Jagota is the Director. Two major advantages occurred, one administrative and the other technical. Some of the recommendations of the Fifth Central Pay Commission were ordered to be implemented with effect from 1.1.1996. Dr BT Uke, the predecessor, had taken efforts to prevail upon the NTI staff and officers to draft a common proposal for the benefit of the entire non-gazetted staff and forwarded it to the pay commission. The pay commission revised scales only for a few cadres. The extension of these benefits to other similar cadres came through the efforts of Dr Jagota. For the first time, the technical cadres with requisite qualifications and technical

competence who had been neglected received some attention. Yet, a lot needs to be done, especially the revision of recruitment rules which is under process. However, the future of some of these cadres seems brighter than earlier. On the technical front too, there have been changes. This can largely be attributed to Dr Jagota who has worked with a number of stalwarts. She has also had 23 years of service in the NTI in different capacities.

It augurs well that in the recent past, most of the top brass from DGHS, Ministry of Health i.e., Health Secretary, Director General of Health Services, Addl. Secretary, Deputy Director General (DDG) (TB), Joint Secretary, Assistant Director General (ADG) (TB) visited

NTI. Equally important are visits made by officers from WHO, World Bank, IUATLD and SAARC TB Centre. These interactions have contributed to the growth of NTI. The visit of Dr DS Bam, Director, SAARC TB Centre, Kathmandu initiated the process of training participation between the two institutions. On 26th July 1998, Dr P Kumar, Deputy Director, SAARC TB Centre, arrived to explore collaborative possibilities for the participating countries. One of which was the expansion and modernisation of the library and information wing. He held discussions with key officers and also with the editorial committee of the NTI Bulletin¹³⁸.

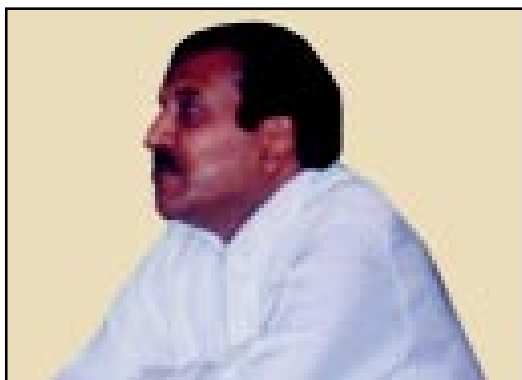
Since 1993, NTI was asked to conduct training courses on RNTCP in addition to its regular



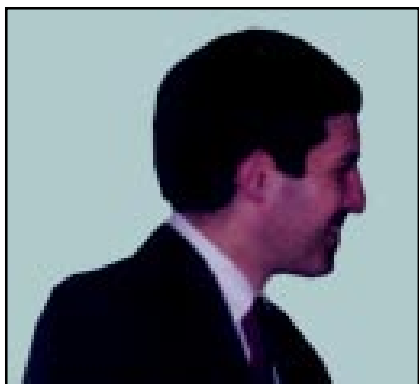
Dr. S.P. Agarwal
DG, DGHS, New Delhi



Dr. GR Khatri
DDG (TB) New Delhi



*Mr. Deepak Gupta
Joint Secretary (Health), GOI, New Delhi*



*Dr. Thomas R Frieden
Present SMO, WHO, SEARO, New Delhi*



*Dr. Ichhpujani
ADG (TB) New Delhi*

activities¹²⁶. It trained key personnel e.g., MOs, Sr. LTs, Sr. TB Supervisors as per the revised modules. The *Reorientation Workshop for DTOs of SCC districts on RNTCP* was conducted in July 1997. It had 34 participants who were senior state level officers from different states. The second training course for STOs/Directors of different states in RNTCP, was held in December 1997. The faculty from the Central TB Division, DGHS viz., Drs GR Khatri, DDG, RL Ichhpujani ADG, and TR Frieden, WHO MO came to NTI to guide the officers¹³⁹. In the next two to three years, its involvement in training is scheduled to increase with expansion of RNTCP. It was also given the responsibility to make supervisory visits to selected RNTCP areas. NTI is experiencing the second wave of excitement after 1960s by imparting such intense modular training courses along with conducting other regular training programmes. More work is anticipated in the coming years because of new operations research related to the RNTCP.

Since the decision to resume the

regular training courses was taken, the participation of the DTC key personnel has increased from 30 to approximately 80-100 per course. The courses of eight weeks duration are organised twice a year in the months of January and July. The contents of the training course are under constant revision to suit the requirement of the programme with induction of revised strategy. Key officers conducting TB work must therefore have adequate expertise in NTP and RNTCP methodologies. The NTI continues to set high standards illustrated by the presentations made by the trainees in the concluding weeks of the course. The suggested readings, supplied to the trainees, lists about 300 important citations in 20 branches of TB work. Training activities in other categories like PGs, and undergraduates continue as usual.

Various workshops were organised in 1998-99 for key medical college professors, administrators on improved coordination between RNTCP officials and jail authorities, policy on participation of NGOs in RNTCP, NGOs participation in

Karnataka, on operations research, Epidemiology of TB and Epi-info training, ranging from two to twelve days. These were largely sponsored by WHO, World Bank and Department for International Development – India (DFID). Top brass from ministry, DGHS, WHO, IUATLD, DFID and international facilitators participated in these workshops. Besides, several modular training courses in RNTCP were organised during 1998-99 for STOs/DTOs belonging to DTPs which would be implemented under RNTCP in the next few years. These courses were of seven to ten days duration with the purpose to create a large number of trained TB key personnel for implementing RNTCP in their areas for rapid implementation. Efforts were made to impart as much insight and skill as possible. These programmes were extremely labour intensive¹³⁸.

There have been excellent technical achievements. NTI has put into operation **Quality Assurance in Sputum Microscopy under RNTCP**. Modalities have been developed and tested to send a set of hundred blinded slides to

be examined by the STCs and DTCs once in six months and returned. Data forms have been designed for direct computer entry, facilitating immediate analysis. Results can be computer generated quickly and corrective action taken immediately thereafter. In a large country like ours, periodic supervision by such a method can assure a quality control check on the working of STCs and DTCs. For this purpose NTI has eight of the sixteen centres (Bangalore, Ajmer, Agra, Patiala, Ahmedabad, Calcutta, Simla and Srinagar) under its jurisdiction. This work will also be carried out by the TRC, which has been allotted eight other centres. The laboratory at the NTI has been identified as National TB reference laboratory along with the laboratory of TRC. It is participating with the Supranational Reference Laboratory, Brisbane, Australia for external quality assurance. There will be a system of constant and periodic checks on the standards maintained and accreditation by certification. The section has also conducted studies to develop the use of different media for preparation of routine culture, and

to identify prevalence of environmental mycobacteria in soil¹³⁹. MB-Bact-240 system is installed. This system has the advantage of accelerating the recovery and identification of TB bacilli from the specimens within three to four weeks as against the conventional methods which take eight to twelve weeks. This is a step forward to move with time¹³⁸.

During 1997-98, 15 research studies were undertaken and three more were proposed¹³⁹. During 1998-99 14 research studies were undertaken and eight more have been proposed. The studies undertaken during earlier years are under progress¹³⁸. NTI faculty also participated in about 60 seminars, conferences, workshops and CMEs at different places from 97-99, to enhance the general awareness on the TB programme and their work. A few more cohort studies to assess the status of patients treated under DTP and RNTCP have been initiated. Plans are under way to conduct studies in collaboration with National Institute of Mental Health and Neuro Sciences (NIMHANS), and

IISc, Bangalore in the field of economic loss due to TB and testing of vaccine candidate respectively^{138,139}.

The NTI computer facilities continue to be upgraded. In addition, NICNET and INTERNET facilities have been provided. It has now an E-mail facility: **address ntiindia@blr.vsnl.net.in**. To enhance facilities to users, the library is now equipped with “5223-T Zoom” Modi Xerox Copier; a new PC-Pentium with MMX technology, to which all databases have been loaded. Action has been initiated for activating retrieval services from MEDLINE through NICNET. Clearly, learning by research and dissemination of knowledge acquired continues to be NTI’s forte.

The monitoring section has been given an additional thrust. All the posts of the section have been filled. Greater attention is being given to supervision of DTCs needing NTIs intervention. The Director is regularly reviewing both the implementation and supervision work to strengthen the NTP at the grass root level. It is extremely

important to increase the efficiency levels of the NTP and to network with NGOs and private practitioners. Its publications wing has brought out the highly acclaimed “*Summaries of the NTI Studies*”, a goldmine collection of operations research conducted from its inception. It has also brought out a booklet: “*Childhood TB*” and the manual “*Isolation, Identification and Sensitivity Testing of Mycobacterium TB, Ed.2*” During 1997, eleven papers have been published and five papers were presented in the 52nd National Conference on TB and Chest Diseases held at Ahmedabad¹³⁹. During 1998, eight papers were published and nine papers are under publication. Also, two papers in the 53rd National Conference on TB & Chest Diseases at Bhubaneswar, Orissa, and one paper each at IUAT Conference, Bangkok and National Congress of respiratory diseases, Jalandhar, were presented¹³⁸.

5.3. In prospect

The expression “In prospect” used for the subheading here, is