

## **Contribution of Training section towards Human Resource Development activities at NTI**

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### **Training to the fore**

A prime objective for the genesis of National TB Institute (NTI) was to impart the requisite knowledge and skills required for key medical and paramedical personnel of the health services to execute the National Tuberculosis Programme (NTP). Training activities cannot be construed to be a one time effort but a continuous process that needs to be sustained indefinitely - the relevance of the Training section in catering to the development of human resources of NTP in India cannot be overemphasized.

The guidance and encouragement for conducting training activities was not only provided by the Directors of NTI but also by luminaries of the stature of the erstwhile Hon'ble Union Minister for Health, Ms Sushila Nayyar who, during her visit to NTI on 5<sup>th</sup> February 1964 urged that the institute should regard training of District Tuberculosis Centre personnel as *one of its main functions and should keep in touch with them after training to help and guide them in their work*. Very wise words of wisdom indeed to a fledgling institute and even to this day four and a half decades later, we are grappling with the aspect of extending the concept of training activity to continue beyond the scheduled dates of training courses organized at the institute.

A voyage through the fifty glorious years of training activities would be too arduous but an effort is made to outline the salient features of the section's contribution since 1962. The nature, content and the duration of training courses held at NTI evolved over time since the 1960s commensurate with the existing policies and guidelines of the NTP. Germane to the issue of training were the availability of standardized training materials and training schedules for all categories of health care personnel involved with the NTP. Also, the training materials were periodically reviewed and updated to be in tune with the newer initiatives of the NTP. NTI has always played a pivotal role in the drafting of training modules and their updating, right since the inception of the Institute.

### **The Beginnings**

#### ***National Training Course for District Tuberculosis Programme (DTP) key personnel***

The first training course designed at NTI was the National Training Course for District Tuberculosis Programme (DTP) key personnel and was focused on capacity building of in-service medical and paramedical personnel to function as a coordinated team to implement the DTP. The team comprised of six categories of key officials –medical officer, treatment organiser, laboratory technician, X-ray technician, BCG team leader and statistical assistant. The training curriculum consisted of lectures, practical demonstrations and extensive exposure to field activities. The practical training imparted created an ambience wherein each category of key staff not only learnt his job but also got conversant with the nature of job of the other key personnel and was thus aware of the link and flow of work pertaining to the DTP. Thus the concept of the DTP training was to train a team of medical and paramedical workers so that on successful completion of training they could be suitably posted by their state governments to implement the DTP in their respective areas. This training course was held thrice a year and was for duration of three months and was on occasions, also attended by WHO fellows. To augment the quality of the training programme

guest lectures were solicited from stalwarts of the caliber of Dr J Frimodt Moller and Dr Hugh Scott (during the 6<sup>th</sup> DTP training course), Dr Karl Styblo and Dr Grzybowski (during the 22<sup>nd</sup> DTP training course). The quality, duration and content of the DTP training courses were constantly reviewed and revised. The first revision of the DTP training modules was undertaken in 1973. The initial training courses were organized thrice a year and were subsequently reduced to biannual events. With passage of time, the six-monthly courses were gradually reduced to eight weekly ones without compromising on the quality of training. The 86<sup>th</sup> and last of the National Training Course for DTP key personnel was held in 2002.

The National Training Course for District Tuberculosis Programme (DTP) key personnel was the most important training programme organized by NTI for almost four decades since the early 1960s to the late 1990s. However, despite the fact that the institute tried to enthuse state governments, there was a slow but steady decline in the number of key DTP personnel deputed to NTI for the training course over the years. Sufficient importance was not given to sending the appropriate personnel for the training courses and they were often not effectively utilized after the conclusion of the course. In fact some states stopped nominating participants for the training at NTI.

### **Group Education Activity (GEA)**

To partly mitigate the diminishing nomination of participants for the training courses, an innovative step was taken during 1990-91 to address this problem by conducting Group Educational Activity (GEA) on NTP in different locations across India. The GEA was a platform for dissemination of information on the various components of the NTP. Facilitators from NTI visited several districts - Chinsurah and Hoogly (West Bengal); Aurangabad (Maharashtra), Chindwara (Madhya Pradesh), Agarthala (Tripura), Ahmedabad (Gujarat), Hyderabad (Andhra Pradesh), and Ajmer (Rajasthan). The GEA received the desired affirmative response from state governments in terms of the numbers of participants trained during the endeavour. At times, even senior administrators from the state also attended the GEA.

### **Tuberculosis control seminars**

In addition to the routine DTP training course, brief TB control seminars were organized every year for senior professionals involved with the NTP - Assistant Directors (TB), Directors of TB Training and Demonstration Centres and other senior tuberculosis workers- to review the basis and implementation of the DTP. The first such seminar was held in 1962 and attended by 28 delegates. It was an annual event during the initial years and became a biannual one in the mid 1970s.

### **Other training activities**

The vision of our esteemed predecessors to encourage operational research to improve the quality of NTP implementation is exemplified in training courses on research methodology varying from two to six months for young scholars. Customized training courses, sensitization programmes, orientation courses, seminars and workshops were devised to address the felt need of academicians, postgraduate students, researchers, Public Health Nurses, administrators, bacteriologists, epidemiologists and WHO Fellows. The Indian chapter of International course in epidemiology and control of TB (Prague Course) was held in 1967 at NTI and was inaugurated by Sri K Puttaswamy, Minister for Health of the erstwhile Mysore state.

## **The Present**

Human Resource Development (HRD) for DOTS implementation is well defined in the Revised National Tuberculosis Control Programme (RNTCP) guidelines and standardized training modules are available for all categories of staff involved in TB control activities - medical officers, laboratory technicians, supervisors and DOT providers. With the advent of RNTCP, the new millennium ushered in a review of the training courses conducted at NTI in the year 2002, in a meeting organized in the Institute involving HRD experts from WHO Geneva. During the review, it was decided to restructure the training courses organized at NTI to address the training needs of RNTCP. The aim of RNTCP training programmes is to ensure that medical officers and paramedical staff are equipped with the necessary skills and knowledge required to implement and sustain TB control activities including management of TB-HIV co-infection, drug resistant TB, quality assurance of sputum microscopy, sputum Culture, data Management and forging partnerships with all sectors involved in TB control activities.

All RNTCP training activities at NTI are organized in coordination with the HRD unit at Central Tuberculosis Division (CTD). Careful planning ensures that all key personnel involved with the RNTCP are adequately trained in RNTCP and also on the newer initiatives under the programme. The proposed annual plan for training activities to be held at NTI is prepared for the ensuing year and sent to CTD. The CTD communicates the annual training plan to all State TB Officers. Prior intimation of the annual training plan ensures staggered nomination of candidates in appropriate batch sizes and also provides adequate time to secure release of participants from their offices for attending the training programmes. Also, the training section works in tandem with the hostel, stores and transport sections of the institute to facilitate smooth organization of training activities.

The training methodology for all RNTCP trainings is essentially through modular reading using relevant modules, group discussions, and individual & group exercises. This is augmented with presentations and field visits. Hands on training are an integral component of all laboratory related training programmes. Though the facilitators for training activities are essentially drafted from the officials of NTI, the expertise of other organizations like WHO are also sought on occasions. NTI organizes the most numbers of training programmes in RNTCP among all national institutes.

### **RNTCP training programmes conducted at NTI**

#### **RNTCP Modular training for Medical Officers**

This twelve day induction training course imparts skills and knowledge to state and district level TB Control programme managers and medical college teachers to effectively manage RNTCP in their respective areas.

#### **TB/HIV training**

Training on TB/HIV has been integrated into the revised RNTCP Modules. Stand alone TB/HIV trainings of two days duration are conducted for officers who have not undergone training on the revised RNTCP modules.

## **Training on Managing Information for Action**

The objective of this five days training programme is to build the capacity of state and district level RNTCP managers to analyse and interpret the routinely collected RNTCP programme data for effective management of the programme in their area.

## **Training in Epi-centre**

Another novel training course conducted for the first time at NTI, or any wherein the country, is the five day capacity building training in Epi-centre for RNTCP Consultants and data entry operators on Windows based Epi-centre.

## **Laboratory related training programmes**

In the capacity of a National Reference Laboratory (NRL) under RNTCP, NTI is responsible for capacity building of human resources of officers at the sub-national level to execute quality assured sputum microscopy and manage drug resistant tuberculosis. Accordingly, training courses and orientation programmes have been devised for microbiologists, laboratory technicians and programme managers at the state level. The institute periodically organizes training programmes on External Quality Assessment (five days course), Culture and Drug Susceptibility Testing (ten days course), Orientation in EQA for Directors of State Tuberculosis Training and Demonstration Centres and State TB Officers (2 days duration). The four days training in preventive maintenance and minor repairs of binocular microscopes is unique as it is only conducted by NTI and is a boon to laboratory technicians especially those working in places where AMC services are wanting. Another noteworthy development in 2010 is the establishment of National Training Centre of Excellence at NTI under the Expand TB project. Subsequently, one batch of participants has been trained in Line Probe Assay.

## **Training activities held in collaboration with WHO and SAARC**

Being a WHO collaborative centre since 1985, the institute also conducts training programmes and workshops in various facets of TB control in conjunction with WHO. WHO fellowship courses in TB control, Epidemiology, Bacteriology, Data Management and Radiology are periodically organized at NTI. The section prepares reports for submission to WHO in the capacity of the institute being a WHO collaborating centre.

Training courses in Leadership skills and Mycobacterial Culture and Drug Susceptibility Testing have been successfully organized in collaboration with SAARC TB & HIV/AIDS Centre, Nepal.

## **Other training activities**

Training of Trainers in RNTCP, seminars for post graduate medical students and sensitization meetings for private practitioners are some of the training activities undertaken at NTI in addition to those mentioned above. On occasions, NTI faculty has lent their expertise in training programmes organized by states at their request. The training section has also facilitated meetings conducted in the institute by other organizations like Karnataka State Aids Prevention Society (KSAPS), Central Government Health Services (CGHS) and CUPA.

## **Organization of Workshops**

The Training section provides assistance in the organization of National and International workshops conducted at NTI - OR CME Workshop, Regional Workshops on TB surveillance, programme monitoring and evaluation, Protocol development workshops- are a few instances of the workshops organized by the institute either on its own or in collaboration with international agencies like WHO and The Union.

## **Conclusion**

As mentioned in the beginning, evaluation of training programmes is an issue which needs to be strengthened as it is confined to pre and post test questionnaires and reaction evaluation sought from participants at the conclusion of training on the quality of training material, methodology, facilitation and the general ambience of the training course. Other factors linked to the evaluation of training programmes - performance of the trainees in the field, feedback of the community and their leaders with the quality of RNTCP services- are practically non-existent.

Almost all trainees who have passed through the portals of NTI, have appreciated the warmth and amicable nature not only of the Director and facilitators but also of all the officers and hostel staff with whom they had interacted with during the course of their stay at NTI. NTI Newsletter (later named NTI Bulletin) was an important medium through which trainees kept in touch with the institute long after the completion of their training, though email and mobile phones are now the preferred modes of communication. The sanctity associated of being NTI trained can best be exemplified by an article titled 'Planning a TB control programme in India', published in the first NTI Newsletter in 1964, in which the author, Dr R C Sharma signs off as *Alumnus of NTI, Bangalore, at present MO-TB Centre, Patiala.*