

WORLD HEALTH ORGANIZATION SPONSORED ACTIVITIES AT THE NATIONAL TUBERCULOSIS INSTITUTE, BANGALORE : APRIL 2004 - MARCH 2005 - A TOUCHSTONE EXCELLENCE

Introduction

The National Tuberculosis Institute (NTI) Bangalore has been nurtured to play a lead role in Human Resource Development (HRD). NTI from the past 4 decades has played a pivotal role in providing trained quality technical manpower both at National & International level. The Institute has not only kept pace with the times, but has often taken a lead to introduce programmes in emerging areas. It has a rich heritage of academic excellence, a strong commitment towards creation & constant up-gradation of infrastructure. An unrelenting endeavor has been made to develop effective teaching skills of its faculty to promote a learning environment. It has been striving hard to provide high quality programmes which fosters Tuberculosis (TB) programme workers to develop knowledge, practice & outstanding analytical abilities. The present document narrates the International accomplishment by the training division of the institute in the last one-year. NTI has been a WHO Collaborative Centre for training & operational research from 1985 & the contract has been renewed for another four years from 2005.

The year 2004 - 05 has been a path breaking with no parallels of the past, as the institute was able to host around 20 WHO sponsored training activities in which around 227 participants took part.

This document takes the reader through teaching methodology adopted in terms of curriculum formation and its delivery to meet the learning objectives of diverse group of participants sponsored by WHO. The role of present Director

Dr Prahlad Kumar whose dedicated efforts to provide necessary technical & infrastructure ambiance required for the effectiveness of the training activities is exemplary. Training programme is meticulously designed to provide the most conducive environment in the form of self contained campus. The faculty & support staff have co-ordinated with the diligence. Because of the unprecedented number of activities in the last year it was thought befitting to attempt a documentation of the fruitful journey.

A brief account of the activities carried out during the year is furnished:

Training

1. Revised National TB Control Programme (RNTCP) : Modular Training for Newly appointed WHO Consultants

The Objectives of the training was to acquaint the participants for undertaking RNTCP consultancy activity in their respective area of operation.

Three (3) RNTCP Modular Training Courses were conducted viz., April 04, December 04 & March 05 with a duration of 15 days. Revised version of RNTCP Modules were used in the training programme held in March 05. In total, 65 newly appointed consultants were trained.

Activities were undertaken to provide training with Modules brought out by Central TB Division (CTD), New Delhi. Field visits were arranged to the Health facilities under Bangalore Mahanagara Palike (BMP) to observe the Microscopy & Treatment activities and inculcate supervisory skills & art of interviewing the patients. The participants



**Addressing the participants by
Dr. L.S. Chauhan, DDG (TB)**



Group work by the participants

also had an opportunity to under go Computer clinic to have an exposure in handling and analyzing the programme data. They were oriented to develop Managerial skill in handling the programme personnel and to analyse, write reports and develop Inter-personal Skills through Role-plays.. Guidelines on Financial Management, Involvement of Non Governmental Organisation (NGO), Epidemiology of TB, HIV & TB, Private Practitioners (PPs) and action plan were discussed at length.

2. Training programme on TB Control for WHO Fellows From Nepal

WHO Nepal sponsored eight District TB Leprosy Assistants (DTLAs) & two Statistical Assistants (SAs) from Nepal for a ten days training programme from 17th May 2004. The Learning Objectives for DLTA was to learn the treatment organization & Directly Observed Treatment (DOT) in TB Control. For SAs it was to learn monitoring, Supervision & performance appraisal of TB Control & computer application.

The DTLAs had a presentation on Genesis of RNTCP, Expansion & performance in India. There was extensive discussion on MPW module & Senior Treatment Supervisor modules. They were exposed to DOT application by a field visit to the DOT demonstration sites under BMP and also had an opportunity to interview the patients in the centers & also at the their residence. Presentation on the field visits were made by the participants.

The SAs had reading & exercise sessions on RNTCP Module 7 & 8 of in the forenoons and computer skills in the afternoon sessions. They had an exposure of DOT application by a field visit to the DOT demonstration sites and interviewed patients in the centers as well as in their residence. There was also a detailed discussion on analysis & scrutiny of records & reports.

3. WHO South East Asia Regional Organization (SEARO) Inter Country Workshop on Laboratory Methods for Drug Resistance Surveillance (DRS) in TB.



Inaugural Session



Demonstration of media preparation



Demonstration in culture room

A Workshop on DRS was conducted in June 2004 with 18 participants from SEARO region viz., 4 from Indonesia, 3 each from Bangladesh, India, Myanmar, Nepal and 2 from Thailand

The objectives of the workshop were to review the status of Drug Resistance of MTB in the countries representing the SEARO, discuss the techniques including the sampling methodology for DRS with emphasis on Quality Assurance, mechanism for networking & sharing of Data with programme managers & develop country specific draft plan of action for DRS.

4. Training programme on TB Control for WHO fellows from Maldives, Myanmar and Bhutan

Two (2) Microscopists & 2 Health Supervisors from Maldives for a duration of 3 weeks in July 2004, 4 Medical laboratory Technicians from Myanmar for a duration of 2 weeks and 2 Laboratory Technicians from Bhutan for a duration of 4 weeks in the month of November 2004 were sponsored respectively.

The Learning Objectives for microscopist from Maldives & Myanmar were Diagnosis of TB, Laboratory aspects of Sputum Microscopy, Inter Personal Communication (IPC) Skills and External Quality Assurance programme in TB Control. The Learning Objective for Two Health supervisors from Maldives was treatment organization, IPC Skills, DOTS in TB Control & Computer Skills. The Learning Objective for Medical Laboratory Technicians was Diagnosis & Laboratory aspects of TB, External Quality Assurance in Sputum

Microscopy, processing of specimens, Mycobacterial Isolation, Identification & Sensitivity Testing.

Lectures on Diagnosis, registration, collection of sputum specimen, staining, examination & grading of smears were delivered to the Microscopist. Presentations were made on working principle of microscope, precautions against infection, preparation of stain's and reagents & IPC skills. Discussions were held on manuals & modules for microscopist and quality control on smear microscopy. This was followed by a practicals session in smear preparation, staining & examination. The participants were taken to the microscopy demonstration site followed by a presentation of field report by the participants.

The Health Supervisors had a pre test followed by presentation on Genesis of RNTCP, its Expansion and performance in India. Extensive discussions on the MPW and Senior Treatment Supervisor modules were. The participants were taken for a field visit to the DOT demonstration centre and also had an opportunity to interview the patients in the centers & in their residence followed by a report presentation on the visit. They also had an exposure to basics of computer applications & data analysis.

Presentation on Diagnosis, registration, collection of sputum specimen, staining, examination & grading of smears were made to the lab technicians by the faculty Presentation was also made on the working principle of microscope, precautions against infection,

preparation of stain's and reagents. Practicals in Smear Microscopy was followed by a discussion on manuals & modules. During third & fourth week they had practical exposure on processing of sputum specimens by Petroff's method, Culture

reading, sterilization, sensitivity & identification procedures & rapid techniques for isolating mycobacterium using MB BacT 240 systems. They were also sensitised to the procedure of EQA in smear microscopy.

5. Regional Training on TB Control Programme



Dr Nani Nair addressing participants in the Inaugural session



Participant leaving for field work



Group work by the participants

This activity was conducted from 16 – 27 Aug 04 with 20 Participants from 8 countries. The countries represented were - Bangladesh - 3, Bhutan - 1, India - 2, Indonesia - 3, Maldives - 1, Myanmar - 3, Nepal - 1, Srilanka -3, Thailand - 3. There were a series of guest lecture by leading International & National experts on Epidemiology of TB control, Advocacy, Action Planing, Building Partnership, Presentation Skills, HRD, Report Writing, Supervision, Logistics, Computer Skills & followed by laboratory practical sessions & field visits. This programme was technically supported by WHO Hq, WHO SEARO, New Delhi and Director, NTI as course co-ordinator. Four NTI faculty, epidemiologists, Bacteriologists & TB

Specialist and international experts carried out the facilitation of the training activity.

6. Training for 12 in-country Fellows in Epidemiology, Bacteriology, Microscopy & Radiography on TB Control

The overall objective was to impart knowledge & skills on Epidemiology & Bacteriology for a duration of 6 weeks and Microscopy & Radiography for 2 weeks commencing from 7th November 2004 with emphasis on TB control & managerial skills through lectures, Group discussions, Practical work, Demonstration, Modular Training, case studies, Field visits and presentation of field reports. The participants &



Technical Session



Practicals in smear microscopy



Group photo of participant with facilitators

the faculty in the Institute were of the opinion that this sort of training was mutually beneficial & should be continued further. The completed Fellowship Termination Reports by the state controlling authorities were forwarded to WHO.

7. Training for developing skills in reading MMR / large X-rays films on TB Control for Medical Officer from Maldives

One Medical Officer sponsored by WHO underwent four weeks training from 8th November 2004. The learning Objective was to have an insight on the latest trends in Epidemiological & Bacteriological aspects of TB Control and also improve skills in reading MMR / large X-rays films.

In the Initial two days, the candidate had an opportunity to make a literature search on X-ray reading aspects & its limitations. Thereafter, for the remaining period, presentations on Epidemiology & Bacteriology, role of X-rays in TB control, DOTS & its implementation in TB control, IPC skills & Information Education & Communication (IEC) in TB Control were held in the forenoons. In the afternoons there was reading

of MMR rolls / large X-rays. There were also combined reading sessions on MMR rolls & X-ray with Sr. TB Specialist using the CDs containing X-ray films brought out by WHO. There was also a three days exposure to Principles of working of large X-ray / MMR and Dark room Techniques.

8. Training for Medical Officers on TB control from Bangladesh

Six Medical Officers from Bangladesh underwent 5 days training from 20th December 2004. The Learning Objective was to give a brief exposure on the Epidemiological, Case Finding, Bacteriological aspects, IEC, Advocacy and IPC Skills in TB Control & also on the role of PPs, NGOs and Medical Colleges in RNTCP.

Presentations were made by the NTI faculty on the above said activities. This was followed by an interactive sessions on the topics covered. Bacteriology section made a presentation on guidelines for External Quality Assurance (EQA) programme in sputum Microscopy & a demonstration of Sputum Smear Microscopy explaining the standard operating procedures

involved in microscopy. The participants had a pre & post test evaluation related to laboratory aspect of TB Control. The participants were taken to the DOT demonstration site under RNTCP. The participants were provided with hand outs brought out by WHO along with guidelines on EQA & presentation materials on CD.

9. Training of WHO Fellows From Nepal on Tuberculin Survey Techniques and Management of DOTS

Eleven Health Visitors from Nepal underwent training programme of 6 days duration from 30th December 2004. Of them, 6 under went Sensitization on Tuberculin Survey Techniques and 5 under went Training in Management of DOTS under TB Control

Tuberculin Survey Techniques

The Learning Objective was to get sensitized in Tuberculin Testing & Reading Techniques. The participants had an Introductory lecture on Tuberculin Testing & Reading. This was followed by Presentations on Epidemiological studies & tuberculin surveys conducted in the Institute. Field visit to the Health Centers & to the Schools for Demonstration of Tuberculin Testing & Reading was arranged in the next 4 days followed by feed back on the results of Tuberculin Testing & Reading.

Management of DOTS

The Learning Objective for HVs was to learn the treatment organization, IPC Skills, DOTS in TB Control & share their experience of DOTS. The HVs had a presentation on Genesis of RNTCP, its expectation & performance in India. There was extensive discussion on Multi Purpose Workers (MPWs) & Senior Treatment Supervisor (STS) modules. They had an exposure to DOTS application in the field. The participants had a field visit to the DOT demonstration site and interviewed the patients in the centers & also in the their residence. This was followed by a presentation on field visit by the participants.

10. Training programme on Public Private Mix under RNTCP for WHO Fellows from Philippines & TB control for WHO fellows from Myanmar

The Learning Objectives were to give a brief exposure to the programme aspects of TB Control under RNTCP followed by observation visit to Public Private Mix (PPM) project under RNTCP at BMP.

Fifteen (15) WHO fellows from Philippines took part in a ten days training programme from 14 February 2005 and 2 WHO fellows from Myanmar took part in ten days training programme starting from 21st February 2005 respectively.

Presentations were made by the NTI faculty on epidemiology, bacteriology, Case finding strategies, IEC, Advocacy & IPC Skills in TB Control. They also had an opportunity to have an insight on the policy guidelines brought out by Government of India on the role of Medical Colleges, NGOs & Private Practitioners in TB control. The presentations were followed by interactive sessions on the topics covered. There was also presentation by guest speakers - Swamy Japananda from Swami Vivekananda Integrated Rural Health Centre, Pavagada, Dr Subramanyam - Private Physician, participating in DOTS Programme & Dr Padma WHO Consultant coordinating PPM project in Bangalore. The participants had an opportunity to visit the TB Units of BMP, Dr. Ambedkar Medical College, St Martha's Hospital, Mediscope Hospital, and other NGOs like Suraksha, Benaka Diagnostics, & Hope Foundation for observing the private participation in the TB Programme. The participants had an opportunity to observe how referrals takes place from the private sector to the designated Microscopy centers & recording methodology. The participants made presentation on their field visit & also a presentation on status of TB Control in Philippines.

The participants from Myanmar were tagged with the participants with Philippines from 21st - 25th February 2005. Thereafter they had an exposure with the following activities: IEC, Advocacy & IPC Skills in TB Control. They also had an opportunity to have an insight on the policy guidelines brought out by Government of India on the role of Medical Colleges, NGOs & PPs in TB control. They had an exposure on epidemiology, bacteriology & Case finding strategies in TB Control. Bacteriology section made a presentation on recently brought out guidelines for EQA programme in sputum Microscopy & also made a demonstration of Sputum Smear Microscopy explaining the standard operating procedures involved in microscopy.

Workshop

1. Workshop on Leadership and Strategic Management

The Workshop was conducted from 25 April – 1 May 04 in which 16 Participants from 9 countries viz., Bangladesh - 2, Bhutan - 1, India - 3, Indonesia - 3, Maldives - 1, Myanmar - 2, Nepal - 2, Srilanka -1, Timor-Leste-1 participant. The participants were divided into 4 groups for carrying out group work using Modules on Managerial & Leadership Styles, Team Building, Personal Effectiveness, Building Partnerships, role efficacy, Inter Personnel Communication (IPC) Skills and few presentations. The activity was highly interactive involving one to one discussion, observation during presentation & practical & Exercises. This programme was technically supported by WHO SEARO New Delhi & facilitated by National Experts.

2. Revision of RNTCP Training Modules

RNTCP modules were brought out in the year 1998 & operational aspects were modified over a period of time. In July 04, it was felt that a workshop should be held with the objective of Incorporating some of the lesson learnt with the implementation of the RNTCP since 1993.

Thirty-Nine (39) Experts working in the National Institutes, WHO consultants & State Programme Managers took part in this venture. There was a Plenary sessions to discuss the policy changes to be incorporated for the case finding, Treatment, Programme monitoring & Logistics. The session was chaired by the DDG (TB), CTD, New Delhi. There after the participants were divided in to Three groups for incorporation of policy changes in the modules. These changes were reviewed in the concluding session. The editorial changes, formatting & finalization of Modules 1 – 9 were done at NTI which was later sent to CTD for further refinement & rectification of inconsistency in the modules.

The Salient changes carried out were updating the epidemiological data & sending information on the programme implementation. The new elements added were revised Recording & Reporting formats, procedure for Internal evaluation, expected incidence & case detection, IEC, Action Plan, Role of Medical Colleges in RNTCP, TB/HIV & RNTCP- Voluntary Counseling & Testing Centre (VCTC) Co-ordination, Extra-Pulmonary Tuberculosis, Quality Assurance Network including External Quality Assessment (EQA).

3. Workshop on TB Coalition for Technical Assistance (TBCTA) for TB Control



Group Photograph

This activity was conducted from 16 – 19th November 2004 in which 26 National participants consisting of State TB Officers (STOs) / Directors of State TB Demonstration Centers (STDC) took part. The groups worked to carry out a mini review

of their own state situations using a checklist as the basic tool. During the plenary sessions, the participant were exposed to different tools, techniques, and materials for HRD in TB Control followed by discussions. The group there after discussed specific activities that could be implemented with the technical & financial support of USAID and technical consultants. The purpose of the mini review was to improve skills in a systematic approach for reviewing & improving HRD in TB Control as short & medium-term activity. Workshop methodology was very interactive & the participating states used their own data during the learning process. Each state worked with facilitator during group work. All participants received a manual that included the material for the group work & the facilitator's presentations were provided as additional handouts. This programme was technically supported by WHO Hq, WHO SEARO, New Delhi and Director, NTI as course co-ordinator. Four NTI faculty, Epidemiologists, Bacteriologists, TB Specialist and HRD experts carried out the facilitation of the training activity

Conclusion

The evaluation of the participants attending the various training programme was done in the form of Pre / Mid & Post Tests in their respective

fields. The gains in post test grades were substantial demonstrating that the objectives set for the various activities have been fulfilled. NTI having emerged as center of excellence in training this year was indeed a year to take stock, to look back as well as to look forward. While adhering to the rich traditions of the past as well as its core values, the Institute remains open to new ideas & is committed to evolve and equip itself to the needs of the future. Providing quality training is completely in tune with the emerging global needs and indeed is an unremitting endeavor.

By building upon the basic strengths for the future, strict planning, effective use of resources & realistic action plan, the institute plans to invigorate TB control efforts in South East Asia region by training large battalion of key personnel. The goal set beyond 2005 is equally demanding. The devastation likely to result from HIV/TB co-infection will have far reaching implications for the 21st Century. In order to stem the spread & the resultant impact of these two epidemics, there is a need to build up HRD to cope-up with the situation. The Institute will make an all out efforts to bridge this gap. However it does not wish to rest on its achievement but would use this opportunity to redefine the path for the future.