

NEW DELHI TUBERCULOSIS CENTRE

ANNUAL REPORT
2015 - 2016

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Message from Chairman

It is a matter of immense pleasure and pride for me to associate with New Delhi Tuberculosis Centre especially when the institute is celebrating its platinum jubilee. The growth, efforts and devotion of the institute in supplementing the efforts of Revised National TB Control Program of Government of India in controlling the deadly disease i.e. tuberculosis and also providing quality services in the control of other lung diseases is highly appreciable.



Dr. L.S. Chauhan

NDTB Centre is one of the oldest organization serving TB patients in the country. It was started in 1940 and today it has completed 75 years of glorious service to the community. New Delhi Tuberculosis Centre, a Referral Centre for TB and Respiratory Diseases is also functioning as State TB Training & Demonstration Centre (STDC) and Intermediate Reference Laboratory (IRL) for Delhi State to monitor Revised National Tuberculosis Control Program activities and microscopy centers of Delhi state. A number of research projects are undergoing in the center in association with Central TB Division, Delhi Government and FIND etc. Training and retraining of medical and para medical staff working under RNTCP is a regular feature of the Centre. The center is disseminating knowledge among various target groups in the community regarding TB disease, its curability, availability of services under RNTCP, importance of regularity in treatment and completion of treatment etc. through various IEC activities in the community.

On the occasion of completing 75 years of glorious service in the fight against Tuberculosis, I wish to extend my heartiest wishes to all the staff members who are putting their best efforts to build the Centre as a national institute. I am also grateful to the Ministry of Health & Family Welfare, Central TB Division and Delhi Government for extending their support to the Centre.

Dr. L.S. Chauhan
Chairman

From Director's Desk

This year happens to be the platinum jubilee year of New Delhi Tuberculosis Centre (NDTBC). Borne as a model TB clinic in 1940, NDTBC has grown up as a full-fledged TB institute dealing with all aspects of TB disease viz. Epidemiology, diagnosis, treatment, teaching, research and TB control.



Dr. K.K. Chopra

For diagnostic purpose, the laboratory of the Centre is equipped with all rapid diagnostic techniques. The laboratory is providing DST facilities to 17 out of 25 chest clinics in Delhi state. This year more than 16000 MDR suspects were tested. In addition, we are conducting validation studies for newer diagnostic modalities like second line DST on LPA. EQA of microscopy activities of Delhi state is another responsibility of our laboratory. This year, innovative methods of conducting RBRC as part of EQA were tried in Delhi state. The results were encouraging and have been shared in two international publications.

On treatment front, OPD of the Centre is providing care to cases referred from any part of Delhi and adjoining states for TB and other respiratory ailments. During the year 18400 patients attended the clinic.

For epidemiology, NDTBC conducts periodic screening of employees of various organizations. This year 140 persons were screened for TB. In addition, the faculty of the Centre is associated with field research and surveillance studies of TB disease and resistant pattern.

For teaching and training, the Centre working as State TB Training and Demonstration Centre for Delhi state is providing initial and refresher training to medical and para medical personnel working in

RNTCP Delhi. This year 2337 persons were trained. The number includes sensitization of medical staff and NGO workers.

Research has always been a priority for the Centre. 6 research projects are undergoing at present. During the year 1 international, 7 national publications were from the Centre in addition to 8 presentations in national level conference and 3 were presented in international conferences.

On TB control programme, the Centre is providing technical support to Delhi state RNTCP and its faculty is part of various national level committees working for formation of programme guidelines.

The detailed activities of the Centre are presented in this report. Behind every successful venture is a collaborative effort put forth by several people. I am grateful to the Ministry of Health & Family Welfare and Central TB Division for the financial support. I am also grateful to the State TB Control Officer and State of Delhi to assist the Centre to play a key role in RNTCP activities. Lastly, I am also thankful to Dr. L.S. Chauhan, Chairman and the members of Managing Committee of New Delhi Tuberculosis Centre for their guidance. I am confident that with the administrative cooperation and government help, the Centre will continue to progress and render fruitful service to the community in the field of tuberculosis.

Dr.K.K.Chopra
Director

1. ABOUT THE INSTITUTE

In 1951, New Delhi Tuberculosis Centre was upgraded to be the first TB Demonstration cum Training Centre with the assistance of WHO, UNICEF and Government of India after its establishment in 1940. In 1966, the Centre became a referral Centre for TB patients from all parts of the country who could avail diagnostic and treatment facilities. It is an apex institute recognized well for the diagnosis, treatment, training, teaching and research in the field of TB and Respiratory Diseases. The Centre was designated as State TB Training and Demonstration Centre for the state of Delhi in the year 2005. Since then the Centre has been imparting training and retraining facilities to the medical and paramedical staff of the 25 Chest Clinics under RNTCP.

The Centre actively works in liaison with State TB Cell on getting positive results for all components of a new Stop TB Strategy. As an IRL the institute assists RNTCP ;in maintaining the global standards through quality assurance for the lab in state. The institute has been a guiding force in formulating policy in relation to involvement of Private sector and Medical Colleges in the programme for the management of pediatric TB and operational research.

Laboratory of the Centre, in addition to functions as Intermediate Reference Laboratory (IRL) for Delhi state, is actively participating in newer initiatives under diagnostic front. Base line Drug Susceptibility testing for Second line drugs are being carried out in routine using the MGIT 960 liquid culture system. In addition, the country is moving towards launching of Bedaquiline conditional access program. Across the country, six DR TB centres have been selected to start this exercise. Our laboratory is attached to one of the DR TB centres namely RBIPMT. As per new guidelines, we will do DST for range of drugs for all newly diagnosed MDR cases. Now, we are also performing Line Probe Assay (LPA) for second line drugs as evaluation study being conducted by Central TB Division in collaboration with FIND India.

As State TB Training and Demonstration Centre, the faculty of the Centre is involved in monitory of RNTCP activities in 25 Chest Clinics of Delhi as well as analysis of quarterly reports and giving them feedback accordingly.

2. MANAGING COMMITTEE

1. Dr. L.S. Chauhan Chairman
Vice- Chairman
Tuberculosis Association of India
2. Dr. V.K. Arora Member
Financial Adviser
New Delhi TB Centre/
Vice Chairman (Research and Publication)
Tuberculosis Association of India
3. Dr. A.K. Panda Member
The Additional Secretary & FA
Ministry of Health & Family welfare
4. Shri. Anshu Prakash Member
Joint Secretary (Health)
Ministry of Health & Family Welfare
5. Dr. Sunil D. Khaparde Member
Deputy Director General (TB)
Central TB Division
6. Dr. Rohit Sarin Member
Director
National Institute of TB and Respiratory Diseases
7. The Director Member
VP Chest Institute
8. Dr. S.K. Sharma Member
Director of Health Services
Delhi Administration

- | | | |
|-----|--|------------------|
| 9. | Dr. Alka Saxena
Director Medical Services
New Delhi Municipal Committee | Member |
| 10. | Dr. S.M. Govil
Honorary General Secretary
Delhi Tuberculosis Association | Member |
| 11. | Dr. Arun Gupta
Director, H. & F. Welfare
Directorate of Health
Ministry of Railways | Member |
| 12. | Shri T.S. Ahluwalia
Secretary General
Tuberculosis Association of India | Member |
| 13. | Dr.K.K.Chopra
Director
New Delhi TB Centre | Member Secretary |

3. SCIENTIFIC ADVISORY COMMITTEE

Dr. L.S. Chauhan Chairman New Delhi Tuberculosis Centre	Chairman
Dr. Ashwani Khanna State TB Officer Delhi State	Member
Director V P Chest Institute	Member
Dr. Varinder Singh Professor – Pediatric, Kalawati Hospital Lady Harding Medical College	Member
Shri G.P. Mathur Ex-Statistician New Delhi Tuberculosis Centre	Member
Dr. M. Hanif Bacteriologist New Delhi Tuberculosis Centre	Member
Dr. Nishi Aggarwal Statistician New Delhi Tuberculosis Centre	Member
Dr. K.K.Chopra Director New Delhi Tuberculosis Centre	Member Secretary

4. ETHICAL COMMITTEE

Director VP Chest Institute	Chairman
Dr. Sanjay Rajpal Chest Physician New Delhi Tuberculosis Centre	Member
Dr. M. Hanif ,K.M. Bacteriologist New Delhi Tuberculosis Centre	Member
Dr. Nishi Aggarwal Statistician New Delhi Tuberculosis Centre	Member
Dr. Chinkholal Thangsing NGO – HIV Expert	Member
Shri T.S. Ahluwalia Secretary General Tuberculosis Association of India	Member
Prof. Mala Sinha Faculty of Medical Science Delhi University	Member
Mr. Swetaketu Mishra Advocate	Member
Dr. M. M.Singh Professor, Maulana Azad Medical College	Member
Shri G.P. Mathur Ex-Statistician New Delhi Tuberculosis Centre	Member
Sh. Madan Mohan Delhi TB Association	Member
Sh. Sanjeev Gupta Community Person	Member
Dr. Shanker Matta Epidemiologist New Delhi Tuberculosis Centre	Member

5. SENIOR STAFF MEMBERS

Dr. K. K. Chopra M.B.B.S., M.D., D.T.C.E.	Director
Dr. Sanjay Rajpal M.B.B.S., D.T.C.D., F.N.C.C.P.	Chest Physician
Dr. Mahmud Hanif Ph.D.	Bacteriologist
Dr. Nishi Aggarwal Ph.D.	Statistician
Dr. Shanker Matta M.B.B.S., M.D.	Epidemiologist
Dr. Shivani Pawar M.B.B.S., D.T.C.D.	Medical Officer
Mr. D.C. Uppadhyay B.Com.	Administrative Officer

6. RESEARCH AND PUBLICATIONS

(A) Research papers published.

During the year 2015-16, the following research papers have been published or submitted by faculty of the Centre:

Research Work

1. **Tuberculosis control in India : Journey so far and ahead.**
K.K.Chopra, Sunil Khaparde. Editorial in *Indian J of Tuberculosis* 62, 193-194,2015.
2. **‘Standards of TB care in India : A tool for universal access to TB Care.’** Sreenivas Achauthan Nair, K.S. Sachdeva, Parmar Malik, S. Chandra, R. Ramachandan, N. Kulshrestha, K.K.Chopra. Review article published in *Indian J of Tuberculosis*, 62,2015.
3. **‘Drug resistance among TB cases and its clinical implications’:**
K.K.Chopra, *Indian J of Tuberculosis* 62, 151-155, July, 2015.
4. **‘Accelerating TB notification from Private Health Sector in Delhi India’.** Debashish Kundu, K.K.Chopra, Ashwani Khanna. Paper accepted for publication in *Indian J. of Tuberculosis*.
5. **‘Universal Access to DOTS in Delhi Prisons: where we stand’.**
Meera Dhuria, K.K.Chopra, Nandini Sharma, Ashwani Khanna, S. Chandra. Accepted for publication in *Indian J. of Tuberculosis*.
6. **‘Piloting upfront Xpert MTB/RIF testing on various specimens under Programmatic conditions for diagnosis of TB & Dr. TB in pediatric population’** . K.K.Chopra, et al *PLOS ONE* / D01:10. 1371 / Oct. 15, 2015.
7. **‘Glorious journey of 75 years of New Delhi TB Centre’** article by K.K.Chopra published in 66th TB Seal Campaign *souvenir*, 2015. Tuberculosis Association of India.
8. **‘Implementation of RNTCP services in medical colleges’** article by S. Matta, K.K.Chopra, published in 66th TB Seal campaign *souvenir*, 2015 Tuberculosis Association of India.

(B) Research papers presented in Conference

The 70th National Conference on Tuberculosis and Chest Diseases was organized by Uttar Pradesh Tuberculosis Association under the aegis of Tuberculosis Association of India at King George Medical University, Lucknow, India from 19th February, 2016 to 21st February, 2016. Dr. K.K.Chopra, Director and Dr. M. Hanif, Bacteriologist along with Dr. Sanjeev Saini, Dr. Kaushal Kumar Drivedi, Mr. Himanshu Vashist, Ms. Srashty Sharma, Mr. Zeeshan Sidiq, Mr. Vasim Ahmad and Mr. Manoj Dubey attended the conference.

On behalf of NDTBC, six oral presentations and one poster was presented, each of which illustrated the research methods, related information, outcomes etc. concisely and attractively.

The titles of the presentations were as follows:-

1. Band pattern Analysis of mutations observed in Rifampicin resistance strain of *M. tuberculosis* Complex by Line Probe assay.
2. Drug resistance pattern among *M. tuberculosis* isolates recovered from poor quality sputum specimens.
3. Comparison of Line Probe Assay with Conventional Drug Susceptibility Test for the Diagnosis of Multi Drug Resistant Tuberculosis.
4. Incidence of Non-Tuberculous Mycobacterium and Mycobacterium Tuberculosis Complex Strains among DR-TB suspects in Delhi and Associated Risk Factors.
5. Recovery of *M. tuberculosis* from specimens found to be Smear Negative at Intermediate Reference Laboratory and analysis of Drug Resistant pattern.
6. Baseline resistance to Ofloxacin and kanamycin among multi-drug resistant strains of *M. tuberculosis* isolated at an Intermediate reference laboratory in Delhi.
7. Prevalence of multi-drug resistance among strains of *M. tuberculosis* isolated from patients belonging to different suspect criteria at state level reference laboratory.
8. 'Band pattern analysis of mutations observed in Rifampicin

resistance strains of M. tuberculosis complex by Line Probe Assay'. Paper presented in European Society of Clinical Microbiology and Infections Diseases (ESCMID) conference in Amsterdam, Netherland, April, 2016.

9. 'Institutional Framework for managing financial resources: mapping of fund flow under Revised National TB Programme. India'. Paper presented in 45th Union World Conference on Lung Health Bancelina, Spain.2014
10. 'Intervention to identify and address barriers to notification of TB positive cases diagnosed in private sector'. Abstract sent for presentation in Union Conference 2016.
11. 'Barriers and challenges in treatment searching in pediatric tuberculosis patients attending DOTS Centre in urban areas of Delhi.' Paper presented in NATCON 2015.

(C) Research Projects undergoing

1. 'A multicentre study of diagnostic accuracy and feasibility of the Xpert Ultra for detection of TB and Rifampicin resistance in adults suspected of having pulmonary TB'

Research Project being carried out in NDTB Centre

2. Accelerating TB Notification from the private health sector in Delhi, India

Tuberculosis has been declared a notifiable disease on 7th May 2012. Notification gives an opportunity to support private sector for better practices with reference to Standards TB Care in India (STCI) which include helping the patients to get right diagnosis, treatment, follow-up, contact tracing chemoprophylaxis and facilitates social support systems .The Revised National Tuberculosis Control Programme (RNTCP) has introduced a web-based case-based online reporting platform called 'Nikshay' which enables notification of TB cases from either public or private sector using ICT applications – (a) 'Nikshay' (Case-Based Web Online application) itself, (b) convenient web-login or (c) mobile apps for the purpose of direct notification of TB cases in 'Nikshay' TB notification portal (<http://nikshay.gov.in/HFUSER/HFLogin.aspx>). With the following objectives, the study has been taken

up during the year, after the approval from Scientific and Ethical Committees of New Delhi Tuberculosis Centre . The financial support for the study is from State TB Office, Delhi.

- To improve private health facility (HF) establishment registration in Nikshay by mapping of HF's which were missed to be registered in Nikshay.
- To sensitize health care providers in the private sector about TB being a notifiable disease.
- To facilitate hassle free direct TB notification from the private sector by providing them with Nikshay web login.

The proposed study will be a Prospective Study for a period of one year (from April 2016 to March 2017) which will be carried out in 6 Chest Clinics of Delhi, where few TB notifications have taken place and less number of private health facilities is registered in Nikshay than expected.

The Study participants will be the registered private providers in Nikshay in the identified Chest Clinics until March 2016. Data analysis will be done by the use of Microsoft Excel and Epi Data software. The study outcome will be documented as per the objectives of the study.

3. SMS for sure project:

SMS for sure project was undertaken by NDTB with the aim of assessing the impact of SMS on TB treatment adherence. The project is being undertaken in all chest clinics of Delhi. This project is being managed in collaboration with the State TB cell. The registered cases have been given IDs from the server set up for the project. The patients have been randomly divided in three groups. SMS about registration is sent to all cases. In addition, weekly motivational messages are sent to second group while third sputum cases get SMS whenever they miss the dose. The most effective strategy will be evaluated after treatment outcome of registered cases is reported. Till 31st March 2016, approximately 3000 cases have been registered under the project.

4. “Framework for TB care in prisons”.

Idea behind this project is to identify TB suspects at Tihar Jail, confirm them with CBNAAT and initiate their treatment and ensure proper referral after release from Jail. At the time of release from jail, mechanism of proper referral of cases will be established with the help of jail staff. The methodology of conducting the activity with jail administration has been finalized.

5. “TB Case finding activities at Night shelters of Delhi”

NDTB is planning to undertake this project. Aim of this project is to ensure that staffs of night shelters are trained as DOT providers so that they can identify TB suspects, and they are further referred to the nearby chest clinic for treatment. Long term objective is to open DOT centres in some of the night shelters.

6. Accelerating access to quality TB diagnosis for pediatric cases.

Accurate diagnosis of TB remains an impediment in the management of pediatric TB cases. The diagnosis is complicated because children are unable to expectorate sputum and TB can mimic many other common childhood diseases. Under optimal circumstances, the sensitivity of smear microscopy for the diagnosis of childhood TB remains low. Although conventional culture on Lowenstein-Jensen medium is considered to be the gold standard and liquid culture offers the possibility of more sensitive diagnosis of active TB and drug susceptibility; the turnaround time for results on culture tests remains high. These limitations pose challenges in establishing accurate diagnosis of TB in children and add to the potential for both under and over-diagnosis.

The WHO endorsed, Xpert MTB/RIF® (Cepheid, Sunnyvale, CA, USA), is a cartridge-based fully automated nucleic acid amplification test (CBNAAT) for TB and rifampicin resistant -TB case detection, Xpert MTB/RIF, is a highly sensitive and specific tool with a quick turn-around time, offers an easy and promising solution in addressing these challenges in the diagnosis of pediatric TB. This project in Delhi has been started since April, 2014. This diagnostic facility option is being introduced at the

existing RNTCP labs for the processing of pediatric specimen types such as gastric lavage, BAL, induced sputum, lymph node aspirates, etc. for use in Xpert MTB/RIF. Any pediatrician both in public and private sector can either refer their pediatric suspects to these lab or organize transfer of specimen for free of cost testing. The received specimen are tested on the same day and the results communicated to referring provider electronically (e-mail and SMS) and at the same time notified to RNTCP under Nikshay.

The aim of this project work is to increase the notification of pediatric TB to RNTCP from public and private sector institutions by (i) improving the quality of diagnostic services for TB in pediatric suspects (ii) Building capacity of existing RNTCP labs for processing of pediatric Specimens.

Till 31st March 2016, 14018 samples have been tested. Out of these 13908(%) were from the Public Sector and 110 (%) were received from Private Sector. Both pulmonary and extra pulmonary samples were received and tested. The detail of various samples tested is given below :

Pulmonary:-

Type of Specimen	No. of Specimen	Positivity
Gastric Aspirate	7964	973
Gastric Lavage	54	3
Induced Sputum	200	38
Sputum	2641	464
BAL	485	75
Grand Total	11344	1553

Extra - Pulmonary:-

Type of Specimen	No. of Specimen	Positivity
Abscess	34	18
Ascitic Fluid	100	3
Bone Marrow	1	0

Cervical Aspirate	7	3
CSF	1268	102
Cystic Fluid	2	0
ET secretion	36	4
FNAB	73	22
Knee Aspirate	26	1
Liver Biopsy	1	0
Lymph Node	169	95
Nasal Aspirate	9	0
Pericardial Fluid	41	4
Pleural Biopsy	6	2
Pleural Fluid	500	43
Pus	357	102
Skin Biopsy	3	0
Synovial Fluid	14	1
Tissue	6	1
Tracheal Aspirate	9	3
Urine	15	0
Grand Total	2677	404

Below mentioned table indicates CBNAAT performance for the period from April 2015 to December 2015. Out of 14018 tests performed, 1344 of the samples were found to be MTB positive and RIF sensitive and 209 were found to be RIF resistant.

CBNAAT Performance
Project : Accelerating access to quality
TB diagnosis for Pediatric Cases
(For the period from April 2015 to December 2015)

Total number of tests performed	14018
Total number of MTB not detected	12014
Total number of MTB detected and RIF sensitive	1344

Total number of MTB detected and RIF resistant	209
Number of Invalid test	169
Total number of EP-TB sample processed	2677
Total number of MTB detected and RIF sensitive	313
Total number of MTB detected and RIF resistant	91

(D). MD/MS/DNB Thesis being conducted in collaboration

1. A study of clinic-investigative course of illness in children with intrathoracic tuberculosis on standard chemotherapy

(MD Thesis of PG student of Department of Pediatrics, Lady Harding Medical College, New Delhi)

The incidence of tuberculosis (TB) has declined in the developed world over the past decades, this has not been the case in the developing countries. Children suffer a great deal of TB related morbidity and mortality and contribute substantially to the global disease burden. Occasionally during the course of treatment, there may be a worsening of paradoxical reactions (PRs). It is vital to recognize PRs as they may often be misdiagnosed as superimposed infections, treatment failure, drug resistant TB, etc. A better understanding of the pattern of symptoms resolution in children with TB on treatment regimen will help to improve the efficiency of monitoring by early detection of clinically deviant. Due to insufficient literature available on this aspect, especially in the Indian setting, present study is being carried out to observe the clinical course of intrathoracic TB (I-TB) in children on short course therapy. Children above 06 months and upto 18 years with newly diagnosed I-TB are being included in the study. Mycobacteriological examination like Xpert MTB Rif and MGIT Culture and DST will be done during the course of treatment. Result generated will help to find out the course of illness in children with I-TB on treatment, so that early identification of response/ non-response to therapy and duration of follow-up

may be better understood.

2. A study of the course of illness in children with extra pulmonary tuberculosis on standard chemotherapy

(MD Thesis of PG student of Department of Pediatrics, Lady Harding Medical College, New Delhi)

Tuberculosis is an important ongoing health problem of children in this country. The most common form of tuberculosis (TB) is pulmonary i.e. about 60-80% cases and rest 20-40% account for extra pulmonary TB (EPTB). The most common form of EPTB is lymph node. Other site of involvement includes central nervous system, abdominal, skeletal, etc. The problem in EPTB lies in diagnosing the cases and thereafter follow-up the cases to assess end point of cure. Symptom resolution is highly variable in all forms of EPTB and most of the understanding about the disease course comes from earlier studies on the natural history of disease. The exact pattern, timing of symptom response to modern day therapy and microbiological/ radiological improvement in patients after first time exposure to therapy especially in Indian setting is less clearly stated in the available literatures. Studies that have evaluated the course during treatment are old enough when the drug regimens used were entirely different from modern day chemotherapy. So the present study is designed to study the course of illness in children with EPTB on standard chemotherapy. Children above 06 months and upto 18 years with newly diagnosed EPTB are being included in the study. Mycobacteriological examination like Xpert MTB Rif and MGIT Culture and DST will be done during the course of treatment. Result generated will help to find out the course of illness in children with EPTB on treatment.

3 To study the role of Cartridge Based Nucleic Acid Amplification Test (CBNAAT) in early diagnosis of pulmonary tuberculosis and primary drug resistance in HIV positive patients

(MD Thesis of PG student of Department of Medicine, PGIMER, Dr. Ram Manohar Lohia Hospital, New Delhi)

Tuberculosis (TB) and Human Immunodeficiency Virus (HIV) have been closely linked since the emergence of AIDS. The lifetime risk of TB in immunocompetent persons is 5% to 10%, but in HIV positive individuals, there is a 5% to 15% annual risk of developing active TB disease. Studies have shown that pulmonary TB (PTB) in HIV positive patients remains the most common opportunistic infection in India ranges from 17% to 23%. Sputum microscopy in HIV positive patients is found to be less reliable in diagnosis of TB. Further, increasing number of patients with drug resistant tuberculosis (DR-TB) creates more challenges in its treatment. Conventional diagnosis of DR-TB relies on bacterial culture and drug susceptibility testing, a slow and cumbersome process. Thus, it is very important to identify PTB at an earliest so that it can be managed appropriately. Cartridge Based Nucleic Acid Amplification Test (CBNAAT) is one of a recently developed diagnostic modality which can simultaneously detect TB and perform drug susceptibility testing of one of the key drug – Rifampicin within few hours. So, the present study is being carried out to study early the role of Cartridge Based Nucleic Acid Amplification Test (CBNAAT) in early diagnosis of pulmonary tuberculosis and primary drug resistance in HIV positive patients. HIV positive subjects greater than 18 years of age presented with symptoms/ x-ray suggestive of TB will be included in the study. Mycobacteriological examination like Xpert Rif[™] and MGIT Culture[™] will be done. Result generated will help in early diagnosis and understand pattern of drug resistance of TB in HIV positive patients.

4. Co-Supervisor of DNB Thesis titled **“To study the factors affecting time to start anti tuberculosis treatment among new smear positive pulmonary tuberculosis cases and impact of delay on sputum conversion under RNTCP.”** RBIPMT student, Session 2015-2018.

5. Co-Supervisor of DNB Thesis titled **“To study the factors associated with treatment response in Peripheral lymph node tuberculosis patients on Anti-tubercular treatment under RNTCP”**.

RBIPMT student, Session 2015-2018.

6. Co-Supervisor of DNB Thesis titled **“Sputum culture status at 3rd month and 6th month of patients on category IV regimen under PMDT”**.

RBIPMT student, Session 2015-2018.

MD/MS Thesis work completed in collaboration with Medical colleges

1. **To compare Mycobacterial Growth Indicator Tube (MGIT) and Cartridge Based Nucleic Acid Amplification Test (CBNAAT) in the diagnosis of tuberculosis meningitis in children.**

(MD thesis of PG student of Department of Microbiology, Maulana Azad Medical College)

Diagnosis of tuberculosis is a challenging task, especially in extra pulmonary cases. In pediatric population, the major limiting factor is difficulty in sample collection. Thus, there is a need for rapid, sensitive and specific test for diagnosis of extra pulmonary conditions like Tubercular meningitis. There is paucity on comparative data between conventional methods, Mycobacterial Growth Indicator Tube (MGIT) and Cartridge Based Nucleic Acid Amplification Test (CBNAAT) for the diagnosis of Tubercular meningitis from India. So, the present study was carried out to diagnose *Mycobacterium tuberculosis* from CSF samples of pediatric patients by conventional methods, MGIT and CBNAAT, to compare their results and perform the drug susceptibility testing of isolates by proportion method, MGIT and CBNAAT. The study has been completed in time with required number of subjects enrolled and laboratory tests performed.

2. The occurrence of drug resistance in retreatment cases of pulmonary tuberculosis treated under RNTCP

(MD thesis of PG student of Department of Medicine, Maulana Azad Medical College)

Tuberculosis is one of the oldest diseases known to affect mankind and is a major health problem in India. RNTCP utilizes DOTS for effective treatment of these patients. Due to various systemic comorbidities and patient related factors, problem of resistance has risen. Many studies have been done in case of drug resistance and treatment failure subjects. But there is paucity of studies regarding resistance in category of retreatment cases. Therefore this study was carried out to find out resistance in retreatment cases of both sputum positive and negative patients and study of socioeconomic factors along with comorbidities responsible for emergence of resistance. This study has been completed in December 2015.

3. To compare Mycobacterial Growth Indicator Tube (MGIT) and Cartridge Based Nucleic Acid Amplification Test (CBNAAT) in the diagnosis of osteoarticular tuberculosis.

(MD thesis of PG student of Department of Microbiology, Maulana Azad Medical College)

About 20% patients with active TB have extrapulmonary cases. Of total tuberculosis (TB) cases, osteoarticular TB accounts for 1 – 5% and 10 - 18% of extrapulmonary cases. Osteoarticular TB usually presents as chronic monoarticular arthritis in joints supporting the weight of the body. The diagnosis of osteoarticular TB is often challenging and can be delayed. If diagnosed and treated at early stages, majority of patients are expected to achieve healing with normal function. No single diagnostic modalities are capable of ascertaining the diagnosis and the role of molecular method like Cartridge Based Nucleic Acid Amplification Test (CBNAAT) is still not well defined in management of osteoarticular

TB. So, therefore this study was carried out to diagnose Osteoarticular Tuberculosis by conventional methods, MGIT and CBNAAT and to compare their results.

4. A study to evaluate the role of Cartridge Based Nucleic Acid Amplification Technique in the diagnosis of TB Meningitis in children upto 18 years

(MD thesis of PG student of Department of Pediatrics, Lady Harding Medical College)

Central nervous system (CNS) TB is the most severe and devastating form of TB in children. Despite of availability of many excellent antitubercular agents, TB meningitis (TBM) in children carries significant morbidity and mortality rates between 15% to 32%. At present, the diagnosis of CNS TB remains a complex issue because the most widely used bacteriological detection methods, such as direct smear and culture cannot detect MTB in cerebrospinal fluid (CSF) specimens with sufficient sensitivity in the acute phase of TBM. Culture techniques take more than a week to yield a positive result. Molecular tests are very sensitive and specific but require high level of precaution to avoid contamination at various levels during sample handling. Cartridge Based Nucleic Acid Amplification (CBNAAT) is a self contained fully integrated, automated platform that can be used with minimal technical skills. Even though, this technique has been developed, optimized and assessed specifically for the detection of pulmonary tuberculosis using sputum samples, its utility in the diagnosis of TBM with CSF is not documented well. Therefore this study was carried out to diagnose TBM in children utilizing the CBNAAT. Also the results were compared with MGIT liquid culture and DST. This study has been completed in January 2016

7. PARTICIPATION IN SCIENTIFIC EVENTS

- Delhi TB Association organized one day workshop for NGOs regarding awareness about tuberculosis on 25th April, 2015. Dr. K.K. Chopra, Director participated in the workshop and delivered a lecture on RNTCP implementation in Delhi state and recent policies under RNTCP.
- One day workshop was organised on 25th May 2015 in NDTB Centre for sensitization about Standards of TB Care in India. District TB Officers of Delhi state and nodal officers of Drug Resistant TB Centres participated in the workshop. Dr. Neeraj Kulshrestha Addl. DDG (TB) was invited in the workshop to roll out 'Call for Action' regarding RNTCP in Delhi state.
- RNTCP PMDT Review meeting of Delhi state was held on 28th May, 2015. DDG (TB) Dr. Sunil Khaparde and Dr. K.S. Sachdeva, Addl. DDG TB, reviewed the PMDT services in state of Delhi for the first quarter of 2015. DTOs of chest clinics, nodal officers of CDST laboratories and DRTB centres attended the meeting. New alignment of chest clinics with rapid diagnostic laboratories was discussed.
- Three days National Workshop on "Bedaquiline- Conditional and Expanded Access Programme" for MDR cases was organised by WHO in Delhi from 1st July, 2015 to 3rd July 2015. Faculty of New Delhi TB Centre actively participated as experts in the national workshop.
- Indian Medical Association organized one hour programme on TB Notification on 23rd July 2015 in IMA Hall where all state IMA headquarters were connected through webcast. This was in form of a panel discussion. Dr. K.K. Chopra (Director) was one of the panelists in the programme.
- Ethical committee meeting of NITRD for PG thesis was held on 22nd July 2015. Dr. K.K. Chopra (Director) attended the meeting as Chairman of Ethical Committee. During the meeting, nine thesis proposals were discussed.

- A research project “Leveraging patients, social network to overcome tuberculosis under-detection in India : A field experience” to be conducted by J PAL, an international NGO in collaboration with operation ASHA was discussed with DTOs of Delhi state on 24th July 2015. Work flow and time-line of the projects were finalized.
- ICON-an international conference for general physicians was conducted by Indian Medical Association on 25th and 26th July 2015. On day 2, a panel discussion on Management of MDR and XDR TB was held where Dr. K.K. Chopra (Director) was one of the panelists.
- A meeting to select designs for TB seals to be released on 2nd October 2015 was held in TB Association of India on 4th August, 2015. Dr. K.K. Chopra, Director was one of the member of the committee. It was decided to depict journey of TB control through four visuals namely – Sanatorium treatment, Domiciliary treatment, DOTS and Universal Access.
- Meeting of State Operation Research Committee was held on 13th August 2015 in New Delhi TB Centre. In all 10 research projects were presented, out of these 2 research projects prepared by faculty of NDTB Centre. These two projects also got sanctioned during the meeting.
- A three days workshop to discuss the draft prepared for new Technical and Operational Guidelines under RNTCP was held from 17th to 19th August 2015 in NITRD. Dr. K.K. Chopra, Director participated in the meeting and after group discussion he presented the draft guidelines for chapter on Health System Management.
- Four days workshop for Biomedical Engineers of FIND was organized in NDTB Centre in collaboration with FIND from 19th to 22nd August 2015. Biomedical engineers of four zones alongwith medical officers of FIND and Microbiologists of IRL, NDTB Centre participated in the workshop. The maintenance and calibration of all the equipments was discussed during the workshop.

- PMDT review meeting of Delhi state conducted in New Delhi TB Centre on 26th August 2015. Nodal officers of DRTB Centres, Microbiologists of culture and DST labs and District TB officers attended the review meeting. Quarterly data of Intermediate Reference Laboratory (NDTB Centre lab) was presented by Dr. M. Hanif in the meeting. All indicators of monitoring of PMDT activities in Delhi state were reviewed.
- Two days workshop on “Connected Diagnostic Feasibility” was conducted by Central TB Division in collaboration with FIND on 1st and 2nd September 2015. Dr. K.K. Chopra, Director and Dr. M. Hanif, Bacteriologist participated in the workshop. In the workshop feasibility to conduct pilot study for connected diagnostic initiative (CDI) in two laboratories of Delhi was discussed and laboratory of the NDTB Centre chosen for pilot study.
- Meeting of Scientific Committee of New Delhi TB Centre was held on 14th September 2015 in NDTB Centre. Four research projects were discussed in the meeting. All the projects were cleared for consideration of Ethical Committee after minor corrections.
- Half day workshop was organised by Indian Medical Association and The Union on 18th September 2015 regarding call for TB action project. Draft of TB Management protocol to be released by Indian Medical Association for private practitioners was discussed. This was a simplified form based on Standards of TB Care in India. Dr. K.K. Chopra, Director and Dr. M. Hanif, Bacteriologist participated in the workshop.
- State Task Force meeting of Delhi RNTCP for involvement of medical colleges was held on 24th September 2015 in RML Hospital. The quarterly report of each medical college related RNTCP activities were presented by medical officers. Presentations of newer initiatives under RNTCP was given by Dr. K.K. Chopra, Director and about newer initiatives in diagnostics under RNTCP by Dr. M. Hanif, Bacteriologist.
- A national consultation meeting was organized by Indian Medical Association and The Union on 29th September 2015 to develop guidelines for private practitioners for management of TB cases

under call for action for TB under RNTCP. Dr. K.K. Chopra, Director and Dr. M. Hanif, Bacteriologist participated in the meeting.

- Dr Sanjay Rajpal was invited as guest speaker at the 9th “Community Volunteers Training Programme” specially for ASHA workers on Prevention & Control of TB and its relation to HIV/AIDS, Diabetes & Tobacco use with special reference to Community Participation on 30th September 2015 by Delhi TB Association. He spoke on “Hazards of irregular treatment & prevention of MDR Tuberculosis”.
- TB seals for the year 2015 with theme ‘Towards End TB’ was released by President of India on 2nd October 2015. The function was organised in President House by TB Association of India. Dr. K.K.Chopra, Director attended the same.
- Dr. Shanker Matta, Epidemiologist attended the Zonal Task Force meet for operational research held at Solan (H.P.) from 8th to 10th October, 2015.
- A meeting to sensitized DTOs of Delhi state about upfront paediatric CBNAAT project was conducted on 9th October 2015. They were briefed about the project details, interim results and its expansion to all chest clinics, hospitals and private practitioners looking after 0-14 year’s children. Similar meeting was conducted for medical officers of chest clinics on 10th October 2015.
- Ethical Committee meeting of National Institute of TB and Respiratory Diseases held on 14th October 2015. Dr. K.K. Chopra, Director attended the meeting as its Vice-Chairman. Five research proposals and two notifications were discussed in the meeting. All were approved with slight modifications.
- Notification Committee meeting of Delhi state RNTCP was held on 15th October 2015. Findings of the study ‘Barriers to notification by private practitioners’ were discussed and decisions were taken to fill the gaps observed in the study.
- Eight Workshops on ‘SMS for Sure’ project was conducted in NDTB Centre for DOT Providers from 16th October to 30th October

2015. The DOT Providers were sensitized about the project to be launched. In all, 250 DOT providers of Delhi state participated. Work instructions to be followed in the project were discussed with them.

- Presentation of operational research ‘Comparative yield of mycobacterium tuberculosis by molecular diagnostics in individual respiratory specimens versus pooled specimens for diagnosis pulmonary tuberculosis in children’ was held in Central TB Division on 4th November 2015. Dr. K.K. Chopra, Director and Dr. M. Hanif, Bacteriologist participated as co-investigators.
- Dr Sanjay Rajpal was part of the Faculty at the Pre-conference NAPCON Workshop on Sleep disorders held on the 4th November at Jaipur.
- Dr Sanjay Rajpal participated as Faculty in the 17th Joint National Conference of the Indian Chest Society (ICS) & National College of chest Physicians (NCCP) India (NAPCON 2015) from 4th to 7th November 2015 at Jaipur.
- As part of Platinum Jubilee celebration of New Delhi Tuberculosis Centre, a CME for doctors of chest clinics was held on 16th November 2015 in conference room of NDTB Centre. Lectures on “Paediatric TB and urban TB initiatives” were delivered by experts. Fifty doctors attended the programme. A booklet on the research undertaken at NDTB Centre from 2009 to 2015 was released on the occasion.
- RNTCP Review meeting of Delhi state was held on 16th November 2015. Analysis of quarterly reports of 25 districts of Delhi state was presented by Dr. K.K. Chopra, Director. Representatives from NGOs, ESI and DSAC were also present in the meeting. Coordination with these agencies was also discussed.
- PMDT review meeting of Delhi state was conducted in New Delhi TB Centre on 27th November 2015. Nodal officers of DRTB Centres, Microbiologists of culture and DST laboratories and District TB officers attended the review meeting. All the six diagnostics laboratories and four DRTB Centres representatives gave

presentations in the review meeting. Decision regarding problem at individual labs were taken.

- Review of Delhi state TB and HIV Collaborative activities was held on 30th November 2015 in conference room of NDTB Centre. Representatives of Delhi RNTCP and Delhi state AIDS Control Society (DASCS) participated in the review meeting. Different issues related to collaborative activities between RNTCP and DSAC programme were discussed and a time line was reached to sort them.
- Two days workshop for CBNAAT expansion programme was held on 4th and 5th December 2015 at National Institute of TB and Respiratory Diseases. Preparation of six new CBNAAT labs in Delhi state was presented by Dr. Chopra. Activities of existing sites were also reviewed during the workshop.
- Meeting to finalise the steps of operationalisation of project “Role of pictogram in sensitization for PLHIV cases, was held on 14th December 2015. Representatives from STDC, State TB Cell, Central TB Division and SEAR Pharma group attended the meet.
- Five days national level Lab Management Workshop was held in Hyderabad from 14th to 18th December 2015. Dr. Kaushal (FIND Microbiologist) participated in the workshop jointly organised by Central TB Division and FIND. Topics discussed included lab activities, equipment handling & maintenance, financial aspects and addition to newer diagnostic modalities.
- For rolling out Bedaquiline in Delhi state, sensitization of District TB Officers of all the districts was conducted on 18th January 2016 in New Delhi TB Centre. They were briefed about the drug bedaquiline, its adverse effects, treatment options and recording reporting as per PMDT guidelines. Similar sensitization workshops were conducted for DOTS Plus Coordinators on 20th January 2016 and for Senior Treatment Supervisors on 22nd January 2016.
- A CME programme was held in BJRM Hospital Chest Clinic on 2nd February 2016. Dr. K.K. Chopra, Director delivered a lecture on TB Notification during CME.

- A meeting was held as preparation of two DRTB Centre sites to roll out of Bedaquiline in Conditional Access Programme on 3rd February 2016 at NDTB Centre. Representatives from Janssen and Janssen, DRTB sites and State TB Cell participated in the meeting.
- Ethical committee meeting of NITRD for thesis proposals of DNB students was held on 4th February 2016 under the chairmanship of Dr. K.K. Chopra, Director. Four proposals were discussed and approved with some suggestions.
- Dr Sanjay Rajpal was invited as Speaker to deliver a talk on “GeneXpert and Hain’s test in Extra-Pulmonary Tuberculosis” at The 19th Annual Conference of Association of Chest Physicians (West Bengal) held on 6th & 7th February, 2016 at Kolkatta.
- Dr Sanjay Rajpal was invited by Faridabad Obstetrics and Gynaecology Society (FOGS) as Speaker in their Scientific Workshop cum CME to talk on “New Tests & Techniques in Diagnosis of Genital TB” in February 2016.
- RNTCP Review meeting of 4th quarter of Delhi state was held on 9th February 2016. Analysis of quarterly reports of 25 districts of Delhi state was presented by Dr. K.K. Chopra, Director. Representatives from NGOs, ESI and DSAC were also present in the meeting. Coordination with these agencies was also discussed. In addition other activities like research projects, TB-HIV coordination and involvement of NGOs were also discussed.
- Ethical committee meeting of National Institute of TB and Respiratory Diseases was held on 16th February 2016. Four research projects were discussed. All were approved with slight modifications.
- Review meeting of PMDT service in Delhi state was held on 18th February 2016. Nodal officers of four DRTB Centes and six culture DST laboratories presented their quarterly activities. Recent decisions regarding changes in algorithm, new recording and reporting formats and introduction of Bedaquiline were conveyed to the DTOs and other participants.

- The 70th National Conference on Tuberculosis and Chest Diseases (NATCON 2015) was organized by Uttar Pradesh Tuberculosis Association under the aegis of Tuberculosis Association of India at King George Medical University, Lucknow, India from 19th to 21st February 2016. Dr. K. K. Chopra, Director and Dr. M. Hanif, Bacteriologist along with Mr. Himanshu Vashistha (PhD student), Mr. Zeeshan Sidiq (PhD student), Mr. Manoj Dubey (PhD student), Mr. Vasim Ahmad (PhD student), Ms. Srashty Sharma (PhD student) from the Centre have attended the Conference. During the conference 6 oral presentations and 1 poster were presented, each of which illustrated the research methods, related information, outcomes, etc. concisely.
- Dr Sanjay Rajpal was invited to participate as Speaker in the CME Programme of Annual Conference of Association of India, Bihar chapter “BAPICON 2016” on the topic “Current trend on Bronchial Asthma and COPD” on 20th and 21st February, 2016 in Aurangabad, Bihar.
- Dr. K.K. Chopra, Director participated in the sensitization workshop for ASHA workers in H block, Jahangpuri Dispensary working under BJRM Chest Clinic.
- A meeting for finalization of activities of ‘World TB Day’ in Delhi state was held on 7th March 2016. All the District TB Officers presented their plans to celebrate World TB Day in their districts in form of awareness meetings, CME etc.
- Activities of IPAQT laboratories in Delhi state were reviewed by State TB Officer with Director, STDC on 8th March 2016. Representatives of Clinton Foundation presented the findings of their notification project from five IPAQT laboratories in Delhi state. It was decided that the investigators will share the details of 1808 TB patients diagnosed under the project so as to follow them up for their treatment outcomes.
- A meeting with medical team of Tihar jail was held on 9th March 2016. Dr. K.K. Chopra, Director, Dr Shanker Matta, Epidemiologist, Dr. Ashwani Khanna, STO Delhi and RNTCP Consultant, Dr. Shivani Chandra attended the meeting. Details

of the project 'Framework of TB care in prisons' was discussed regarding its feasibility, work instructions and data management of TB cases detected. It was decided that after the preliminary meeting, presentation will be given to DG Prisons followed by sensitization of staff of Tihar and then role out of the project.

- Dr. K.K. Chopra, Director delivered a lecture in CME in Ch. Desraj Chest Clinic, Rohini on 10th March 2016. He delivered a lecture on 'Diagnosis of TB and MDR TB'. The target audience was medical officers in dispensaries of North Delhi.
- Quarterly Delhi state TB-HIV Coordination Review meeting was held on 14th March 2016. Dr. K.K. Chopra, Director presented RNTCP activities related to TB-HIV collaboration of Delhi state. Various issues related to cross-referral between RNTCP-ICTC and monitoring of HIV activities in RNTCP centres and ART and ICTC centre were discussed.
- A CME for doctors was organized in the Gulabi Bagh Chest Clinic on 16th March 2016 to celebrate World TB Day. Dr. K.K. Chopra, Director has delivered a lecture on "Notification of TB"
- A CME for doctors was organized in the Deep Bandhu Hospital, Ashok Vihar on 17th March 2016 to celebrate World TB Day. Dr. K.K. Chopra, Director has delivered a lecture on "TB diagnosis in sensitive and resistance TB".
- Meeting of OR Committee of Delhi state was held on 18th March 2016. Dr. K.K. Chopra, Director participated in the meeting as its member. During the meeting research proposals were presented before the committee.
- Dr Sanjay Rajpal was invited by IMA Dharamshala as an Expert to speak on "Newer Trends in diagnosis of tuberculosis" at HIM MEDICON 2016 held at Post graduate College Nagrota on 26th & 27th March 2016.
- A CME for doctors was organized in the Pili Kothi Chest Clinic on 21st March 2016 to celebrate World TB Day. Dr. Shanker Matta, Epidemiologist has delivered a lecture on "Notification of TB"
- WHO South East Asia office organized one day workshop on 21st

March 2016 to launch newer initiatives under RNTCP and reviewed TB control programme of South East Asia region countries. Dr. K.K. Chopra, Director presented the innovations in TB notification in Delhi state during review of India TB programme.

- To celebrate the World TB Day, India Medical Association organized a webcast programme on 24th March 2014 on TB Management. Dr. K.K. Chopra, delivered a lecture on “Awareness on Tuberculosis and new Initiatives”, queries of viewers were also answered by him.
- A CME for doctors was organized in the Chest Clinic, Narela on 27th March 2016 to celebrate World TB Day. Dr. K.K. Chopra, Director has delivered a lecture on “TB Diagnosis and treatment”.
- A seminar on the occasion of World TB Day held by Delhi TB Association from representatives of associated NGOs on 28th March 2016. Dr. K.K. Chopra, Director was guest of honor on the occasion and delivered a lecture on ‘Challenges in Management of MDR TB’.
- One day World TB Day symposium was held in AIIMS on 29th March 2016. Dr. K.K. Chopra, Director chaired a session on ‘Programmatic efforts and need for social behavioural support’ during the symposium.
- A CME for doctors was organized in the RTRM Chest Clinic on 29th March 2016 to celebrate World TB Day. Dr. K.K. Chopra, Director has delivered a lecture on “Notification of TB”
- Dr R.C. Jain Memorial oration was delivered by Dr. Somaya Swaminathan in NITRD on 30th March 2016. Dr. K.K. Chopra, Director attended the oration programme.
- International Union Against TB (The Union) organized a CME on 30th March 2016 on the occasion of World TB Day in Hotel Park. Dr. K.K. Chopra, Director attended as an expert for the session.
- A CME for doctors was organized in the BJRM Chest Clinic on 31st March 2016 to celebrate World TB Day. Dr. K.K. Chopra, Director has delivered a lecture on “Notification of TB”

8. MEETINGS

1. A meeting of state level notification committee was held on 1st April 2015 to assess the progress of notification in Delhi state. Members were apprised of the steps taken in this regard like sensitization in major hospitals, one to one interaction with PPs, sensitization of PPs in DTCs by DTOs and allot them log in and passwords.
2. The Managing Committee meeting of New Delhi TB Centre was held on 6th April 2015 in conference room of NDTBC. Issues relating to budget, audit and promotion of staff were discussed.
3. Delhi State RNTCP Review meeting was held on 13th May 2015 in the Conference Room of NDTB Centre. Dr. K.K. Chopra, Director STDC presented the analysis of quarterly report of 25 chest clinics of Delhi state.
4. A notification meet was held on 9th June 2015 in the New Delhi TB Centre with the objective of devising strategies to improve case notification from the private sector and corporate hospitals. Apart from the state TB Cell Medical Officers, representatives from various organizations like WHO, PSI, Clinton Foundation shared their views. Trials and projects which are being undertaken by the above mentioned organizations like problems faced while involving private practitioners, inclusion of corporate hospitals in the RNTCP and upcoming pilot projects were presented by the representatives, which led to a fruitful discussion.
5. A meeting with representatives of J Pal International NGO was held on 26th June 2015. State TB Officer and WHO Consultants also participated in the meeting. This project 'Leveraging patients' Social Networks to Overcome Tuberculosis under-detection in India : A field experiment" was discussed for collaboration with State TB Department.

6. The Managing Committee meeting of New Delhi TB Centre was held on 10th July 2015 in New Delhi TB Centre. Issues relating to Centre were discussed.
7. A state level delegate met the Dean, Army College of Medical Sciences on 6th October, 2015. The purpose was to involve the medical college in RNTCP services a per Medical College Task Force pattern. All the modalities, support and functional activities were discussed and the Dean agreed to give full support for the activity.
8. Meeting of Managing Committee of New Delhi Tuberculosis Centre was held on 9th November 2015 in conference room of NDTB Centre. Matters related to budget, audit, annual report, research activities, allowances and promotions of staff were discussed.
9. A meeting of Ethical Committee of NDTB Centre was held under the Chairmanship of Prof. M.M. Singh-Community Medicine, MAMC. During the meeting, six projects were discussed and committee cleared all the projects.
10. A meeting of NATCON Award Committee of TB Association was held on 22nd December 2015. Dr. K.K. Chopra, Director participated in the meeting as a member of Committee.
11. Inspection of Ethical Committee of NDTB Centre was held on 19th February 2016. Representatives of Drug Control of India and an expert from PGI Chandigarh conducted the inspection. The record and process of ethical clearance of scientific protocols was discussed.
12. A meeting for selection of TB seal awards was convened on 24th February 2016 in TB Association of India. Dr. K.K. Chopra, Director participated in the meeting as one of the member. The states with highest collection for sale of TB seals were selected to be awarded shields during Annual General Meeting of TB Association of India.

9. CLINICAL SECTION

OPD Services

The OPD of the Centre are having patients of TB and Respiratory diseases referred for diagnosis and consultations from various institutions / private practitioners and doctors of neighboring states for the diagnosis and treatment. In addition, cases for medical fitness from different embassies are also referred for diagnosis and treatment. During the year 2015-16, the total OPD attendance at the Centre was 18,400.

TB and Diabetes Clinic

During the year, 767 patients were put on DOTS. Out of them 7 were found to have diabetes. They were further investigated and put on treatment for DM. Subsequently, they were closely monitored for their progress on ATT and control of blood sugar levels as the presence of diabetes is a predisposing factor for Pulmonary TB, and their co-existence is on the rise. All TB patients put on DOTS at NDTB Centre are routinely screened for DM.

TB and HIV Clinic

As per policy laid down by CTD and NACO, an intensified TB / HIV package of services is being provided to TB patients under DOTS. All TB patients are offered voluntary HIV counseling and testing. During the year, 767 patients were put on DOTS. Out of them, none was found to be HIV positive.

Tobacco Cessation Clinic

A tobacco cessation clinic was started in New Delhi TB Centre in the month of January 2013. Till the end of this year, 65 patients have registered themselves and are attending the clinic regularly. They have been briefed about the harmful effects of tobacco and repeatedly motivated to quit tobacco use. 35 of them have completely given up smoking habit and are feeling better and healthy and 30 have reduced the habit of smoking. This effort of New Delhi TB Centre is very small but we are trying our level best to help those who have really understood the harmful effect of the said products and want to get rid of it.

10. EPIDEMIOLOGICAL SECTION

Epidemiology section of New Delhi Tuberculosis centre is involved in various activities. Some of the key activities being undertaken are screening of staff from various organizations, like National Zoological Park, hotels, embassies, involvement in various projects, monitoring and supervision of various chest clinics of Delhi, involvement in TB related projects etc.

Tuberculosis screening of employees from various organizations:

This year following activities related to screening of staff were undertaken

Organization	Dates of screening	Total no. of staff members screened	Total no of staff members referred for further investigations
Spain Embassy New Delhi	19 th -22 nd August 2015 (4 days)	41	06
National Zoological Park, New Delhi	26 th to 27 th March, 2015 and, 6 th to 8 th April, 2015 (4 Days)	99	09

11. PUBLIC HEALTH SECTION

Public Health Section works with the aim to improve health of public having personnel like Public Health Nurse, Medical Social Worker and Multi Purpose Health Worker to accomplish the said goals. They are involved in planning of various intensified programmes on tuberculosis with the specific objective to improve public health through different community based programmes.

Health talk

Different tools are used to create awareness amongst masses; one of them is health talk. Health talk is about talking to individual on different issues, focusing on certain points to make them aware that how important it is for an individual to maintain good health . Keeping this thought in mind health talk on TB on regular basis is delivered in the OPD hall. The patients are made aware about basic information on TB by using flip charts which they can see and read.

TV and film shows

Another method of generating awareness is use of short documentaries on regular basis. Different documentaries are played on TB for patients and their relatives, who visit TB Centre on regular basis. Round the year health talks are given to vulnerable groups well as general population with the help of Nukkad natak/dramatics, lectures, flipcharts, painting competitions etc.

TB Supervisor Course

The new modified TB Supervisor Course was started in July 2013. During the year 2015-16, 3 batches with total strength of 52 students were trained from different states. Broadly the focus was on following topics:

- Tuberculosis in general
- RNTCP
- Modules used in RNTCP
- General aspects of health care

Mantoux test

Mantoux test is done at the NDTB Centre. Apart from being referred from the OPD of NDTB Centre the patients are also referred from various government hospitals as well as treatment by private practitioners for Mantoux Screening.

In the period from April 2015 to March 2016, 7718 mantoux test were done at the NDTB Centre. Out of these, results of 6925 patients were available. Month-wise Mantoux screening undertaken is as follows:

Month 2015-16	Total test	Test read	Reactors >10mm	Reactors <10mm
April'15	631	578	336	242
May'15	667	587	261	326
June'15	779	684	326	358
July'15	608	543	301	242
August'15	843	753	363	390
September'15	674	605	287	318
October'15	591	530	269	261
November'15	469	421	195	226
December'15	552	508	227	281
January,16	617	554	231	323
February'16	696	629	199	430
March'16	591	533	269	264
Total	7718	6925	3264	3661

As shown in the table out of 7718 tests 3264 were reactive to tuberculin which are high as compared to year 2014-15 wherein 5837 tuberculin test was undertaken and 2786 were reactive.

Anti TB Week Celebration (21.3.2016 to 31.3.2016)

The anti TB week celebration is the one of the major in house activity of the Centre. This year from 21st to 31st March, 2015 it was celebrated to mark the occasion. Various events were conducted in the community. The winners were given prizes to boost their participating as well as moral.

Anti TB Week Celebration from 21ST March 2016 to 31ST March 2016

DATE	VENUE	PROGRAMME	PARTICIPANTS	FACULTY INVOLVED
21.03.2016	NDTB OPD HALL	INAGURATION OF ANTI TB WEEK (HEALTH TALK)	ALL PATIENTS AND RELATIVES OF TB PATIENT	DR. CHOPRA, DR. RAJPAL, DR. MATTA, DR SHIWANI, MS. SHADAB, MR. DHAKOLIA, MR. SURESH, MS RADHA AND STUDENTS
22.3.2016	NDTB LAWNS	PAINTING COMPETITION	SPYM, BACHO KA GHAR AND BUTTERFLIES	MS. SHADAB, MR HARIOM AND STUDENTS
23.3.2016	OPEN AREA IN FRONT OF ROOM NO 19	SLOGAN COMPETITION	SPYM, BACHO KA GHAR AND BUTTERFLIES	MS. SHADAB AND MR HARIOM
26.3.2016	LECTURE HALL	QUIZ COMPETITION	SPYM, BACHO KA GHAR AND BUTTERFLIES	MS. SHADAB AND STUDENTS

			AND TB SUPERVISOR STUDENTS	
28.3.2016	NDTB CENTRE	SPEECH	SPYM, BACHO KA GHAR AND BUTTERFLIES AND STUDENTS	MS. SHADAB AND STUDENTS
29.3.2016	SPYM DARYAGANJ	HEALTH TALK	INMATES AND SPYM	MS. SHADAB AND STUDENTS
30.3.2016	NDTB CENTRE	POEM COMPETITION	SPYM , BACHO KA GHAR, BUTTERFLY	MS. SHADAB AND STUDENTS
31.3.2016	NDTB CENTRE LECTURE HALL	VALEDICTORY FUNCTION	STUDENTS AND STAFF	DR. CHOPRA AND OTHER STAFF

24th March 2016 the day to change gear and spread global efforts to end TB altogether:

World TB day is celebrated on March 24th every year to create awareness and to urge people to be cautious and protect themselves from the lethal disease. The theme this year is “Unite to end TB”. The day is an occasion to mobilize political and social commitment to further progress towards eliminating TB as a public health burden.

Community Meetings & Health Talks:

31 st May 2015	To Celebrate ‘World No Tobacco day’ a health talk is delivered for those patients who are taking tobacco in any form. During the talk harmful effects were highlighted in human body.	OPD visitors	Hall in front of Female OPD
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5 th June 2015	A community meet is organized in Hauz Qazi community old Delhi. The community people were emphasized on cleaning their surrounding as well as maintain good environment on World environment day.	Hauz Qazi Community	Residents of the Community
1 st July 2015	An interaction session was organized on 'Doctors Day' with OPD visitors and with our expert doctors. The disease related queries were entertained by them.	OPD Visitors	Main OPD Hall
11 th July 2015	A community women group was addressed that day at Yamuna Pushta where general discussion took place regarding the diseases prevalent in the local community and other major health problems and they request if free check-ups can be arranged for them.	Yamuna pushta community participants	Yamuna pustha
12 th August 2015	A group discussion with TBHV students was organized where different youths related issues were discussed and those youth were emphasize to realize their responsibilities towards the nation.	Students TBHV	Lecture Hall
20 th November 2015	Annual day of NDTB Centre was celebrated at NDTB Centre. The cultural programme by TBHV	Student and Staff	Main OPD Hall

	Students was presented for all the staff followed with grand lunch for all staff and students. This provide an opportunity to interact; with all the staff and other associate in informal manner, keeping aside a busy working schedule.		
1 st December 2015	A sensitization programme for care taker of SPYM was organized to mark the day 'World AID Day'	Care taker of SPYM	Lecture Hall
24 th March 2016	Anti TB Week Celebration and World TB day		

Trainings in Public Health Section:

RNTCP trainings and workshops are regularly conducted at NDTB for the staff involved in RNTCP activities. This year also various activities were undertaken especially targeting the nursing and paramedical staff. Sensitization programme was conducted for nursing students of various colleges regarding RNTCP, signs and symptoms of Tuberculosis, diagnosis, treatment modalities, DOTS, adoption of new techniques for MDR TB diagnosis and its treatment. Topics like infection control for health workers, roles and responsibilities of nursing personnel for care of TB patients and prevention against tuberculosis were also included in the trainings.

Apart from trainings, another major activity undertaken round the year is sensitization of school children. Schools are regularly visited by NDTB staff to sensitize students and teachers about tuberculosis as a disease, its signs and symptoms and its prevention. Students and teachers are also distributed pamphlets to further propagate about tuberculosis. The session ranges from 45 minutes to 1 hour.

12. MYCOBACTERIAL LABORATORY

The Laboratory of New Delhi TB Centre functions as reference laboratory to perform culture and drug sensitivity for *M. tuberculosis* in routine for samples referred from different Institutions as well as from private practitioners of Delhi. Patients from all parts of northern India visit the Centre to avail the laboratory facilities because of its good reputation gained over the years. Now, the laboratory is upgraded to BSL 3 facility and is functioning well with the introduction of newer diagnostic tests like liquid culture (MGIT 960) and molecular test (Line Probe Assay).

District – wise summary of Microscopic activities carried out in the year 2015

Name of DMC	Nos. of TB suspects examined for diagnosis	Nos. of TB suspects found to be positive	Nos. of TB suspects undergoing repeat diagnostic examination	Nos. of TB suspects found to be positive on repeat diagnostic examination	Nos. of follow-up patients examined	Nos. of follow-up patients found to be positive	Total nos. of slides examined	Total nos. of negative slides examined	Total nos. of positive slides examined
BJRM	5970	709	102	9	1845	81	13991	1502	12489
GTBH	10053	1406	30	1	2237	221	22546	2943	19603
HEDGEWAR	3277	439	56	6	654	55	7354	940	6414
KCC	7052	796	255	6	2665	131	17339	1719	15620
LNH	7399	849	53	4	858	100	15769	1825	13944
JHANDEWALAN	3041	454	41	4	1363	115	7427	1001	6426
SPM MARG	4297	562	40	9	1086	80	9627	1202	8425
SHAHIDARA	5328	835	131	7	2226	211	13103	1873	11230
PATPARGANJ	13668	1855	387	11	4470	319	32473	3943	28416
RKM	2454	338	131	19	840	52	6023	725	5298
NEHRUNAGAR	12656	1616	94	10	6929	593	39251	4286	34965
MOTINAGAR	10532	1365	158	33	3969	197	27007	3102	23867
RTRM	6930	764	79	3	1913	163	15877	1730	14101
NARELA	7232	1091	53	1	2429	222	16887	2403	14484

K.NAGAR	6084	1094	26	4	3201	258	15476	2433	13043
NDMC	18789	2241	59	6	3010	163	40777	4567	36210
BSA	6762	971	83	14	2851	237	16560	2192	14368
DDUH	10762	1411	165	13	3898	293	25715	3063	22654
GULABIBAGH	3362	356	125	7	719	54	7380	724	6656
LRS	6745	753	7	0	2067	137	15648	1639	14009
SGMH	7370	962	46	3	2845	144	17301	1914	15387
SHASTRI PARK	6755	954	139	27	2313	222	16066	2214	14856
DESHRAJ	5476	597	97	14	1751	96	12888	1326	11562
MALVIYANAGAR	20440	938	53	1	2685	646	10796	2515	9934
BIJWASAN	3047	345	36	323	2462	249	13377	1414	11963
D TBA's Pavement Dwellers Project	320	85	-	-	110	2	636	150	486
Total	195801	23786	2446	535	61396	5041	437294	53345	386410

During the year, a total of 1,95,801 TB suspects were examined for diagnosis in all 25 chest clinics of Delhi state out of which 23786 were found positive. 4,37,294 slides were examined as per data received from TB laboratory abstract. Out of these 53,345 slides were found positive. A total of 3,86,410 slides were found negative.

On-site Evaluation visit and Panel Testing

An IRL team comprising of Microbiologist, one Medical officer and one Laboratory Technician visits each chest clinic at least once a year to DTCs for on-site evaluation. During the visit, randomly selected DMCs are also covered for evaluation.

Recommendations of the annual supervisory visits to the districts by the IRL have focused on operational and technical problems of the laboratories including availability of staff, infrastructure, regular supply of consumables and training. During the visit, panel testing for STLs was conducted. DMCs reporting false positive or negative errors in RBRC were also visited by the IRL team.

List of DTCs visited by IRL Team for OSE

S. No.	Name of Chest Clinic	Date of visit
1.	R.K. Mission Chest Clinic	30/01/2015
2.	BJRM Chest Clinic	12/2/2015
3.	PPG Chest Clinic	3/3/2015
4.	GTBH chest clinic	4/3/2015
5.	Dr. Hedgewar Chest Clinic	13/04/2015
6.	Gulabi Bagh chest clinic	16/04/2015
7.	Narela chest clinic	14/05/2015
8.	Shastri Park chest clinic	22/05/2015
9.	CH. Desraj chest clinic	27/05/2015
10.	P. Kothi Chest Clinic	5/6/2015
11.	Malviya Nagar chest clinic	24/08/2015
12.	B.S.A chest clinic	27/08/2015
13.	Kingsway chest clinic	28/08/2015
14.	Shahdara chest clinic	16/09/2015
15.	Karawal Nagar chest clinic	29/09/2015
16.	SGMH chest clinic	29/10/2015
17.	L.N.H chest clinic	3/11/2015
18.	L.R.S. chest clinic	4/11/2015
19.	Jhandewalan chest clinic	9/11/2015
20.	Bijwasan Chest clinic	8/12/2015
21.	Rao Tula Ram chest clinic	15/12/2015

Programmatic Management of Drug Resistant Tuberculosis (PMDT) Activities

The laboratory got certification by CTD for Line Probe Assay, solid and liquid culture and DST. Currently sputum samples received from 17 chest clinics for diagnosis and follow-up under PMDT activities in Delhi.

PMDT activities carried out during the year April 2015 – March 2016 (Specimens processed on culture or DST)

Quarter 2015-2016	Diagnostic Sputum Specimens inoculated	Follow-up Specimens inoculated	LPA DST Done	H+R Sens	H+R Res	Only H Res	Only R Res
2Qr 2015	1261	1654	1024	785	131	69	39
3Qr 2015	1780	1941	1458	1078	165	103	27
4Qr 2015	1622	2043	1284	999	151	107	24
1Qr 2016	1439	1695	1162	921	119	104	17
TOTAL	6102	7333	4928	3783	566	383	107

The table provide the details of laboratory tests done under PMDT activities during the year 2015-16. A total of 6102 sputum specimens were processed out of which 566 cases turned out to be MDR-TB and 107 Rif mono resistant.

**Laboratory examinations carried out for cases referred by
Private Practitioners during the year 2015 - 2016**

Month	Laboratory examinations		
	Smear examination	Culture (Solid)	Drug Susceptibility testing by solid culture
April, 15	202	202	14
May	158	158	22
June	202	202	00
July	224	224	12
August	199	199	14
September	172	172	30
October	157	157	07
November	151	151	12
December	181	181	29
January, 16	155	155	34
February	185	185	45
March	207	207	05
TOTAL	2193	2193	224

Table depicts month wise laboratory examinations carried out during the year 2015-16. A total of 2193 smears were examined, 2193 cultures inoculated and 224 drug susceptibility testing were performed in the year.

13. TRAINING AND MONITORING SECTION

The Centre has Training and Monitoring Section equipped with an auditorium, a conference room and a lecture hall and audio-visual aids. New Delhi Tuberculosis Centre as STDC conducts training courses for medical and paramedical staff on various aspects of RNTCP. This year also, various training activities were undertaken, details of which are mentioned in the tabular form.

These training activities were targeted at –

- a. Nursing staff from various nursing colleges
- b. Medical officers working at various chest clinics of Delhi
- c. Paramedical RNTCP staff
- d. Interns
- e. Others (NGOs, Night shelter workers etc)

TRAINING ACTIVITIES

In all during the year, 112 days of training sessions were conducted wherein 2337 personnel were trained regarding various aspects of the RNTCP which includes 94 sessions of 1 day training programmes and 9 sessions of 2 days training programmes. Topics like infection control for health workers, roles and responsibilities of nursing personnel for care of TB patients and prevention against tuberculosis were also discussed in detail. The details of training are given below:-

**Training programmes conducted from
01 April 2015 to 31st March 2016**

S. No.	Detail of Training	Period		Days	No. of Participants
1	One day workshop cum training for upgradation of Nikshay programme for DTOs and Microbiologists	08.04.2015	08.04.2015	1	14
2	One Day RNTCP Sensitization Programme for Medical Students of Mulana Azad Medical College	10.04.2015	10.04.2015	1	32
3	One Day RNTCP Sensitization Programme for MBBS Students of 4th Semester of Mulana Azad Medical College	21.04.2015	21.04.2015	1	30
4	One day sensitization programme for LHV Students from Lady Reading Health School under RNTCP	30.04.2015	30.04.2015	1	32
5	One day sensitization of medical officers and review meet under RNTCP Delhi State	13.05.2015	13.05.2015	1	20
6	One Day Training of District TB Officers on Standards of TB Care in India under RNTCP	25.05.2015	25.05.2015	1	27
7	One Day RNTCP Sensitization Programme for Medical Students of Maulana Azad Medical College	26.05.2015	26.05.2015	1	18
8	One Day Training of Medical Officers on Standards of TB Care in India under RNTCP	28.05.2015	28.05.2015	1	31
9	One day Training of Medical Officers on	08.06.2015	08.06.2015	1	28

	Standards of TB Care in India under RNTCP				
10	One day review workshop on Notification of TB patients under RNTCP for representative from CHAI and medical officers under RNTCP	09.06.2015	09.06.2015	1	17
11	One Day RNTCP Sensitization Programme for Medical Students of Maulana Azad Medical College	10.06.2015	10.06.2015	1	15
12	One day Training of Medical Officers on Standard of TB Care in India under RNTCP	10.06.2015	10.06.2015	1	32
13	One day Modular training programme for Medical officers of ESI Dispensaries under RNTCP	15.06.2015	15.06.2015	1	10
14	One day Modular training programme for Medical officers of ESI Dispensaries under RNTCP	17.06.2015	17.06.2015	1	18
15	One day Modular training programme for Nurses and DOT Providers of ESI Dispensaries under RNTCP	22.06.2015	22.06.2015	1	22
16	One Day RNTCP Sensitization Programme for Medical Students of Maulana Azad Medical College	24.06.2015	24.06.2015	1	51
17	One day Modular training programme for Nurses and DOT Providers of ESI Dispensaries under RNTCP	24.06.2015	24.06.2015	1	25
18	Two days training of STLS in LED FM Microscopy under RNTCP	29.06.2015	30.06.2015	2	8

19	One Day RNTCP Sensitization Programme for Medical Students of Maulana Azad Medical College	01.07.2015	01.07.2015	1	17
20	One day RNTCP training of Staff Nurses from Nightingale School of Nursing	04.07.2015	04.07.2015	1	30
21	Two Days training of Laboratory Technicians in LED FM Microscopy under RNTCP	06.07.2015	07.07.2015	2	6
22	One day training & field visit of Nurses from Delhi State Hospitals under RNTCP	08.07.2015	08.07.2015	1	22
23	Two Days training of Lab. Technicians in LED FM Microscopy under RNTCP	13.07.2015	14.07.2015	2	7
24	One day RNTCP training of Staff Nurses from Nightingale School of Nursing	15.07.2015	15.07.2015	1	32
25	One day training & Field visit of Nurses from Delhi State Hospitals under RNTCP	17.07.2015	17.07.2015	1	25
26	Two Days training of Lab. Technicians in LED FM Microscopy under RNTCP	20.07.2015	21.07.2015	2	11
27	One day sensitization of care taker from Rain Basera of Delhi under RNTCP	21.07.2015	21.07.2015	1	5
28	One day programme of Medical officers under RNTCP	24.07.2015	24.07.2015	1	12
29	One day training of DEOs in Nikshay programme under RNTCP	24.07.2015	24.07.2015	1	19
30	Two Days training of STLS in LED FM Microscopy under RNTCP	27.07.2015	28.07.2015	2	8

31	One day training & field visit of Nurses from Delhi State Hospitals under RNTCP	28.07.2015	28.07.2015	1	23
32	Two Days training of STLS in LED FM Microscopy under RNTCP	30.07.2015	31.07.2015	2	9
33	One day training & field visit of Nurses from Delhi State Hospitals under RNTCP	31.07.2015	31.07.2015	1	27
34	One day training & field visit of Nurses from Delhi State Hospitals under RNTCP	04.08.2015	04.08.2015	1	22
35	One day sensitization of care taker from Rain Basera of Delhi under RNTCP	04.08.2015	04.08.2015	1	11
36	One Day RNTCP Sensitization Programme for Medical Students from Mulana Azad Medical College	05.08.2015	05.08.2015	1	22
37	One day sensitization of TB Alert volunteers from Delhi under RNTCP	07.08.2015	07.08.2015	1	21
38	One day workshop and review meeting of Delhi state DTOs under RNTCP	12.08.2015	12.08.2015	1	34
39	One day Delhi state operation Research workshop under RNTCP	13.08.2015	13.08.2015	1	11
40	One Day RNTCP Sensitization Programme for Medical Students of Maulana Azad Medical College	14.08.2015	14.08.2015	1	55
41	One day Delhi State PMDT Review cum Discussion workshop under RNTCP	26.08.2015	26.08.2015	1	39
42	One day Retraining of	07.09.2015	07.09.2015	1	17

	Senior TB Supervisors on STCI, Notification & New Diagnosis under RNTCP				
43	One Day training of medical officer from chest clinic & medical colleges under RNTCP	09.09.2015	09.09.2015	1	27
44	One Day RNTCP Sensitization Programme for Medical Students of Mulana Azad Medical College	10.09.2015	10.09.2015	1	15
45	One day Retraining of Senior TB Supervisors on STCI, Notification & New Diagnoses under RNTCP	10.09.2015	10.09.2015	1	19
46	One day Retraining of Senior TB Lab. Supervisors on STCI, Notification & New Diagnosis under RNTCP	15.09.2015	15.09.2015	1	15
47	One day Retraining of Senior TB Lab. Supervisors on STCI, Notification & New Diagnosis under RNTCP	17.09.2015	17.09.2015	1	20
48	One Day RNTCP Sensitization Programme for Graduate and post Graduate Medical Students of Mulana Azad Medical College/ Patel Chest Institute	18.09.2015	18.09.2015	1	15
49	One day RNTCP training of 2nd year candidates from Jamia Hamdard College of Nursing	29.09.2015	29.09.2015	1	29
50	One day RNTCP Training of Medical student from Army Medical College	30.09.2015	30.09.2015	1	15
51	One Day RNTCP Sensitization Programme for Graduate and Post Graduate Medical	30.09.2016	30.09.2016	1	15

	Students of Maulana Azad Medical College/ Patel Chest Institute				
52	One day RNTCP sensitization of Nursing Students of Lady Reading School of Nursing Nightingale School of Nursing	08.10.2015	08.10.2015	1	34
53	One day RNTCP sensitization workshop of DTOs about Paediatric CBNAAT project	09.10.2015	09.10.2015	1	34
54	One day RNTCP sensitization workshop of Medical Officers about Paediatric CBNAAT project	10.10.2015	10.10.2015	1	28
55	One day Workshop Cum Training on SMS for sure for DOT Providers under RNTCP	16.10.2015	16.10.2015	1	26
56	One day Workshop Cum Training on SMS for sure for DOT Providers under RNTCP	19.10.2015	19.10.2015	1	29
57	One Day RNTCP Sensitization Programme for Medical Students from Maulana Azad Medical College	20.10.2015	20.10.2015	1	25
58	One day Workshop Cum Training on SMS for sure of DOT Providers under RNTCP	20.10.2015	20.10.2015	1	30
59	One day Workshop Cum Training on SMS for sure of DOT Providers under RNTCP	21.10.2015	21.10.2015	1	27
60	One day Workshop Cum Training on SMS for sure of DOT Providers under RNTCP	23.10.2015	23.10.2015	1	30
61	One Day RNTCP	28.10.2015	28.10.2015	1	15

	Sensitization Programme for Medical Students of Mulana Azad Medical College				
62	One day Workshop Cum Training on SMS for sure of DOT Providers under RNTCP	28.10.2015	28.10.2015	1	35
63	One day Workshop Cum Training on SMS for sure of DOT Providers under RNTCP	29.10.2015	29.10.2015	1	34
64	One day Workshop Cum Training on SMS for sure of DOT Providers under RNTCP	30.10.2015	30.10.2015	1	22
65	One day RNTCP sensitization of Nursing Students of Lady Reading School of Nursing and Nightingale School of Nursing	03.11.2015	03.11.2015	1	32
66	CME cum review workshop of Delhi State of District TB officers under RNTCP	16.11.2015	16.11.2015	1	40
67	One Day Delhi State PMDT (programmatic management of drug-resistant tuberculosis) review and sensitization on new strategies under RNTCP	27.11.2015	27.11.2015	1	34
68	One day RNTCP sensitization of Nursing Students of IGNOU	28.11.2015	28.11.2015	1	20
69	One Day RNTCP Sensitization Programme for Medical Students of Maulana Azad Medical College	28.11.2015	28.11.2015	1	16
70	One Day Delhi State TB-HIV (Tuberculosis-Human Immunodeficiency Virus) under RNTCP	30.11.2015	30.11.2015	1	21

71	One Day RNTCP Sensitization Programme for Medical Students of Mulana Azad Medical College	02.12.2014	02.12.2015	1	6
72	One day RNTCP sensitization of Nursing Students of from Holy Family College of Nursing	17.12.2015	17.12.2015	1	50
73	One day training programme on CBNAAT for Lab. Technicians under RNTCP	17.12.2015	17.12.2015	1	12
74	One day training programme on CBNAAT for STLS under RNTCP	18.12.2015	18.12.2015	1	15
75	One day sensitization programme on introduction of Tab (IT) role under RNTCP	21.12.2015	21.12.2015	1	12
76	One day training programme on CBNAAT of New Delhi Municipal Corporation staff (Medical Officers) under RNTCP	21.12.2015	21.12.2015	1	7
77	One day training programme on CBNAAT of STS & Dots Plus Supervisors under RNTCP	22.12.2015	22.12.2015	1	16
78	One Day RNTCP Sensitization Programme for Medical Students of Maulana Azad Medical College	28.12.2016	28.12.2015	1	7
79	One day training programme of Delhi State on implementation of Bedaquiline under programmatic management of Drug resistant tuberculosis for DTOs	18.01.2016	18.01.2016	1	31
80	One day training programme of Delhi State	19.01.2016	19.01.2016	1	24

	on implementation of Bedaquiline under programmatic management of Drug resistant tuberculosis for medical officers				
81	One day training programme of Delhi State on implementation of Bedaquiline under programmatic management of Drug resistant tuberculosis of Sr. TB Supervisors	20.01.2016	20.01.2016	1	35
82	One Day RNTCP Sensitization Programme for Medical Students of Maulana Azad Medical College	21.01.2016	21.01.2016	1	16
83	One day training programme of Delhi State on implementation of Bedaquiline under programmatic management of Drug resistant tuberculosis for STS	22.01.2016	22.01.2016	1	36
84	Two days RNTCP sensitization of Nursing Students of Lady Reading School of Nursing (1st Yrs. Batch)	27.01.2016	28.01.2016	2	32
85	One day training programme for Delhi State DTOs on implementation of Bedaquiline under programmatic management of Drug resistant tuberculosis by Central TB Division	03.02.2016	03.02.2016	1	29
86	One day meet on "Bedaquiline" by delegates from Belgium and India (Johnsons & Johnsons) under RNTCP	04.02.2016	04.02.2016	1	14

87	One day RNTCP sensitization of Nursing Students of Lady Reading School of Nursing (2nd Yrs. Batch)	05.02.2016	05.02.2016	1	46
88	One Day RNTCP Sensitization Programme for Medical Students of Maulana Azad Medical College	06.02.2016	06.02.2016	1	18
89	One day review workshop of Delhi State on quarterly performance of RNTCP and introduction of project "SMS for sure"	09.02.2016	09.02.2016	1	36
90	One day Workshop Cum Training on SMS for sure of DOT Providers under RNTCP	11.02.2016	11.02.2016	1	18
91	One day review workshop of Delhi State on quarterly performance of RNTCP and training on PMDT monitoring indicators under RNTCP	18.02.2016	18.02.2016	1	33
92	One Day RNTCP Sensitization Programme for Medical Students of Mulana Azad Medical College	24.02.2016	24.02.2016	1	24
93	One day training of Delhi State District TB officers (DTOs) on EQA performance under RNTCP	25.02.2016	25.02.2016	1	23
94	One day training of Delhi State medical officers on EQA guidelines under RNTCP	26.02.2016	26.02.2016	1	24
95	One Day RNTCP Sensitization Programme for Medical Students of Maulana Azad Medical College	07.03.2016	07.03.2016	1	10
96	One Day meet on World	07.03.2016	07.03.2016	1	29

	TB Day Celebration agenda discussion programme under RNTCP				
97	Two Days training of STLS/Lab. Technicians on LED FM Microscopy under RNTCP	14.03.2016	15.03.2016	2	12
98	One day review workshop of Delhi State on quarterly performance of RNTCP and TB-HIV monitoring indicators under RNTCP	14.03.2016	14.03.2016	1	19
99	One day project discussion by medical officers under Operational Research programme in Delhi State under RNTCP	17.03.2016	17.03.2016	1	24
100	One Day RNTCP Sensitization Programme for Medical Students of Mulana Azad Medical College	21.03.2016	21.03.2016	1	11
101	Two Days training of STLS/Lab. Technicians on LED FM Microscopy under RNTCP	29.03.2016	30.03.2016	2	12
102	One day RNTCP sensitization programme for students from School of Butterfly Daryaganj	29.03.2016	29.03.2016	1	13
103	One day RNTCP sensitization of LHV Nursing Students of Lady Reading Health School of Nursing	31.03.2016	31.03.2016	1	26
	Total			112	2337

Training for various Personnel trained/ Sensitized under RNTCP during 2015-16

S. No.	Trainings for various Personnel	No. of Trainings	No. of Days	No. of Participants
1	Medical Officers	32	32	769
2	STS	2	2	100
3	STLS	8	13	75
4	Lab. Technicians	8	11	60
5	DOT Providers	10	10	302
6	Nursing Students	17	18	529
7	Medical Students	22	22	448
8	DEO	1	1	19
9	DRTB Supervisors	3	3	35
	Total	103	112	2337

103 training sessions were conducted at New Delhi TB Centre-STDC in 112 days and 2337 personnel, which included programme managers, Medical officers, ground level RNTCP staff (STS/STLS, lab technician, Data entry operator), Nurses, Para-medicals, PG-Students and interns from various government as well as private institutions were trained / sensitized on various aspects of RNTCP.

In addition, faculty of New Delhi TB Centre participated in following training programmes :

1. The LPA training for 6 days from 11th to 16th May, 2015 was organized for Laboratory Technicians and Microbiologist from IRL-Aligarh, Agra and NDTB Centre. The training was coordinated by FIND-India. Total eight candidates participated in the training. Dr. Sanjeev (FIND) and Ms. Seema (NDTBC) facilitate the training.
2. Mrs. Gurpreet Kaur, Public Health Nurse of NDTB Centre was

invited as resource person for training of nursing students of Nightingale College of Nursing, Noida from 28th to 30th May 2015.

3. One day training of all the laboratory staff for first aid and safety measures was conducted in NDTB Centre. Facilitator for this practical training was Public Health Nurse, Mrs. Gurpreet Kaur. Microbiologists and Laboratory Technicians working in the laboratory were trained in two batches on 2nd and 3rd June, 2015.
4. Mrs. Gurpreet Kaur, Public Health Nurse visited Nightingale College in GFATM project as external trainer for the TB programme for three days i.e. 6th to 8th July 2015. She took classes on TB, MDR TB, TB-HIV etc.
5. Five days liquid culture hands on training was organized at NDTB Centre from 13th to 17th July 2015 in collaboration with FIND. One microbiologist, each from IRL AIIMS and IRL NDTB Centre alongwith three technical staff of NDTB Centre laboratory attended the training.
6. School students from Sarvodya Kanya Vidhyalaya were sensitized by Mrs. Gurpreet Kaur, Public Health Nurse regarding TB prevention, treatment facilities etc. on 27th July 2015.
7. Three days onsite training of Microbiologists, Technical Officers and Laboratory Technicians for second line DST on LPA was held in NDTB Centre laboratory from 1st December to 3rd December 2015. This was in relation to pilot study on second line DST by LPA to be conducted at six sites, NDTB Centre being the first laboratory to roll out the project. The training was facilitated by FIND and the technical experts from the manufacturing company.
8. Four days training of trainers for implementation of Bedaqueline under Conditional Access Programme was organised by Central TB Division at NTI Bangalore from 5th to 8th January 2016. Dr K.K. Chopra, Director and Dr. M.Hanif, Microbiologist attended the same for training of medical and para medical staff of two

sites selected for implementation in Delhi state.

9. Sensitization programme for care takers of night shelter at Delhi Gate was organised on 25th January 2016. Dr K.K. Chopra, Director, Mrs. Shadab, Medical Social Worker and students of TB Supervisor course sensitized the care takers about tuberculosis, its diagnosis and prevention.
10. Field training of project 'Role of Pictogram as counselling tool for ICTC clients' was done in ART Clinic of Lok Nayak Hospital on 5th February 2016.

Analysis of Quarterly Cohort Reports

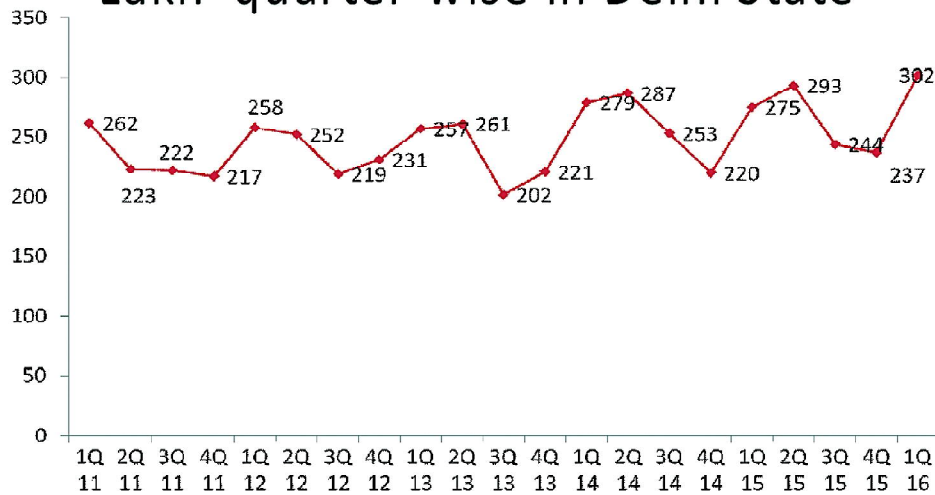
Compilation and preparation of quarterly reports (Sputum Conversion, Treatment Outcome and Programme management) of all chest clinics under RNTCP of Delhi state and their feedback is one of the major activities of STDC. The analysis of the quarterly report for each chest clinic in Delhi is carried out and the feedback, which includes necessary instructions for improvement is prepared and are discussed at the quarterly review meetings with the District TB Officers. All these feedbacks and complied reports of the state are sent to the DTOs and copies of these are also submitted to State TB Control Officer and to Central TB Division, Ministry of Health & Family Welfare.

Chest Clinic wise performance of RNTCP in Delhi State: CASE DETECTION IN 2015.

S. No.	Chest clinic	Population (in lakhs) covered	No.of suspects examined	Suspects examined/ lakh population /Yr.	Suspects examined/ lac papulation /Previous Yrs.	Rate of Change in suspects examined/lac population (Compared Previous Yrs.)	No. of smear positive patients diagnosed	Suspects examined per smear positive case diagnosed
1	BJRM	6.0	6117	1020	1074	-5	734	12
2	Bijwasan	6.0	5694	949	803	18	606	11
3	BSA Rohini	7.0	6945	992	992	0	947	14
4	Ch Desraj Rohini	8.0	5990	749	686	9	735	12
5	DDU	12.0	11283	940	906	4	1488	13
6	Gulabi Bagh	3.5	3377	965	1001	-4	1115	33
7	GTBH	6.0	10428	1738	1784	-3	1402	13
8	Hedgewar	4.0	3357	839	858	-2	476	14
9	Jhandewalan	5.0	2930	586	698	-16	448	15
10	KCC	7.5	8243	1099	822	34	876	11
11	Karawal Nagar	7.0	6524	932	855	9	1127	17
12	LNH	4.0	7668	1917	1808	6	839	11
13	LRS	7.0	6734	962	935	3	1003	15
14	Malviya ngr	6.0	4544	757	689	10	734	16
15	Moti Nagar	11.0	11072	1007	923	9	1454	13
16	NDMC	11.0	19663	1788	1819	-2	2301	12
17	Narela	6.0	6957	1160	1219	-5	1010	15
18	Nehru Nagar	15.0	12717	848	871	-3	2196	17
19	Patparganj	11.0	13963	1269	1184	7	1925	14
20	R.K.Mission	3.0	2582	861	842	2	365	14
21	RTRM	7.0	7313	1045	960	9	814	11
22	SGM	6.0	7483	1247	1250	0	1030	14
23	Shahdara	5.0	5600	1120	1021	10	829	15
24	JPC Hospital	7.0	7807	1115	1083	3	1174	15
25	SPM	5.0	4366	873	827	6	561	13
	TOTAL	176.0	189357	1076	1041	3	26189	14

A total of 176 lakh population was covered by 25 chest clinics operating in Delhi and 189357 suspects were examined. Of them 26189 smear +ve patients were diagnosed. Suspects examined per lakh population has increased from 1041 (last year) to 1076 this year.

Trends in TB Suspects Examined/ Lakh quarter-wise in Delhi State



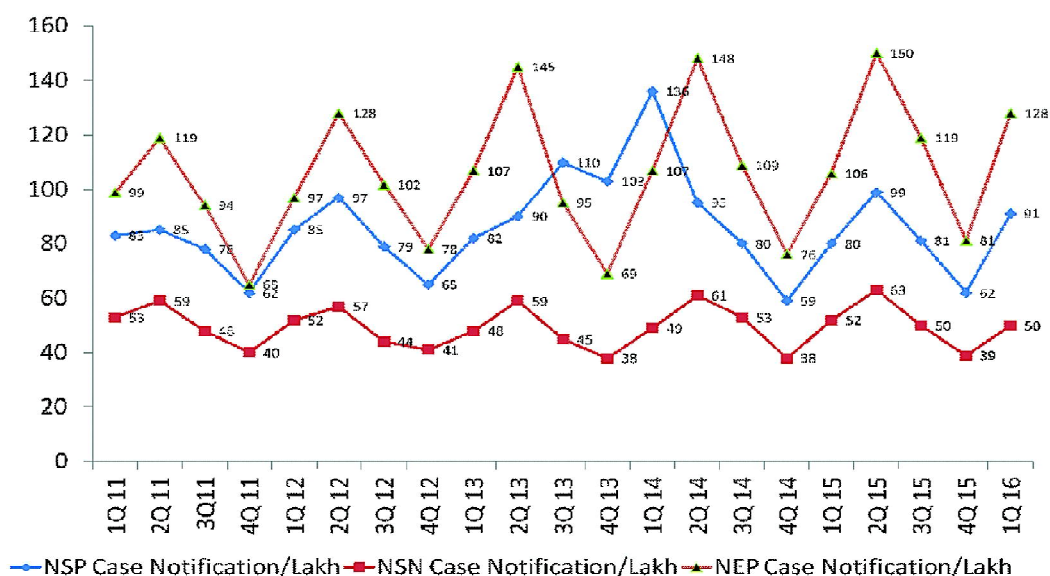
TB suspects/ lakh population (302) shows an increasing trend as compared to last two quarters. On comparing with 1st quarter 2016, it has increased substantially. It also touched to the lowest level of 244 in 4th quarter 2015. However, it has been continuously improving since 2014 onwards. The upward and downward trend can be attributed to seasonal variation and other factors

**Chest Clinic wise annual performance of RNTCP in Delhi State:
CASE NOTIFICATION IN 2014**

S. No.	Chest clinic	Annual smear positive case detection rate(%) (from PMR)	Annual smear positive case notification rate [from CFR:sm+ cases (NSP+ Rel+TAD) per population	Annual smear positive case notification rate [from CFR:sm+ cases (NSP) per population	Total patients registered for treatment	Annual total case notification rate	Annual NSP case notification rate	Annual NSN case notification rate	Annual New EP case notification rate
1	BJRM	163	120	79	1736	289	79	43	98
2	Bijwasan	135	105	71	1586	264	71	33	99
3	BSA Rohini	180	128	91	2785	398	91	82	148
4	Ch Desraj Rohini	123	82	54	1830	229	54	41	83
5	DDU	165	114	83	3596	300	83	48	110
6	Gulabi Bagh	425	80	53	724	207	53	28	78
7	GTBH	312	123	89	2051	342	89	45	134
8	Hedgewar	159	69	50	768	192	50	20	85
9	Jhandewalan	119	100	58	1357	271	58	33	94
10	KCC	156	101	72	1851	247	72	40	81
11	Karawal Nagar	215	174	124	3738	534	124	89	216
12	LNH	280	74	50	915	229	50	33	93
13	LRS	191	123	90	2043	292	90	39	105
14	Malviya ngr	163	174	132	2608	435	132	61	151
15	Moti Nagar	176	116	80	3900	355	80	60	134
16	NDMC	279	94	67	2815	256	67	37	96
17	Narela	224	149	103	2243	374	103	60	121
18	Nehru Nagar	195	129	85	5234	349	85	61	121
19	Patparganj	233	147	101	4142	377	101	51	144
20	R.K.Mission	162	100	70	645	215	70	36	60
21	RTRM	155	106	76	1643	235	76	29	77
22	SGM	229	144	98	2729	455	98	103	164
23	Shahdara	221	138	94	2115	423	94	72	155
24	JPC Hospital	224	162	113	3301	472	113	47	194
25	SPM	150	82	54	1017	203	54	22	68
	TOTAL	198	120	83	57372	326	83	50	119

In all 57372 patients were registered for treatment in the year 2015-16 from 25 chest clinics of Delhi. Annual smear positive case detection and case notification rate was 198 and 120 respectively. Total notification rate (NSP) was 326 and New Smear Positive case notification was 83. Annual NSN and EP case notification rate was 50 and 119 respectively.

Trends of Case notification of Annualized-NSP,NSN and NEP/Lakh Population in Quarter-wise



cases especially in the last two quarters (Graph). If all the three indicators are seen from 1Q2011 onwards, they have been showing a “Rise and fall trend”. A prominent point in the graph is that all the three indicators touched their highest level in 1Q2014 /2Q2014 with NSP case notification rate of 136, NSN case notification rate per lakh of 61 and EP case notification per lakh rate of 148 respectively. This phenomena may be attributed to seasonal trend or other factors.

Chest Clinic wise annual performance of RNTCP in Delhi State: NEW AND RELAPSE CASES IN 2015

S. No.	Chest clinic	NSN % among total pulmonary cases	EP % among total cases	NSP % among total pulmonary cases	Total Pulmonary Cases	NSP	Total Cases	Relapse +TAD	Other (New+ Relapse)	Repeat Sputum examination	% Rept Spt	Failure
1	BJRM	35	34	65	729	472	1736	246	163	92	2	8
2	Bijwasan	32	38	68	625	427	1586	202	141	66	1	22
3	BSA Rohini	47	37	53	1211	637	2785	259	274	73	1	7
4	Ch Desraj Rohini	43	36	57	762	431	1830	221	180	74	1	6
5	DDU	37	37	63	1575	996	3596	374	303	175	2	24
6	Gulabi Bagh	35	38	65	283	185	724	94	69	148	4	5
7	GTBH	34	39	66	802	531	2051	209	221	34	0	13
8	Hedgewar	28	44	72	278	199	768	78	70	44	1	3
9	Jhandewalan	36	35	64	456	291	1357	211	204	34	1	17
10	KCC	36	33	64	842	539	1851	218	173	272	3	14
11	Karawal Nagar	42	40	58	1496	871	3738	350	365	51	1	18
12	LNH	39	40	61	332	201	915	95	110	38	0	8
13	LRS	30	36	70	900	630	2043	229	173	15	0	9
14	Maiviya ngr	32	35	68	1157	789	2608	257	233	4	0	57
15	Moti Nagar	43	38	57	1537	879	3900	400	470	144	1	20
16	NDMC	35	38	65	1147	740	2815	294	292	47	0	22
17	Narela	37	32	63	974	617	2243	277	247	37	1	22
18	Nehru Nagar	42	35	58	2191	1272	5234	656	546	80	1	29
19	Patparganj	33	38	67	1667	1110	4142	512	344	364	3	35

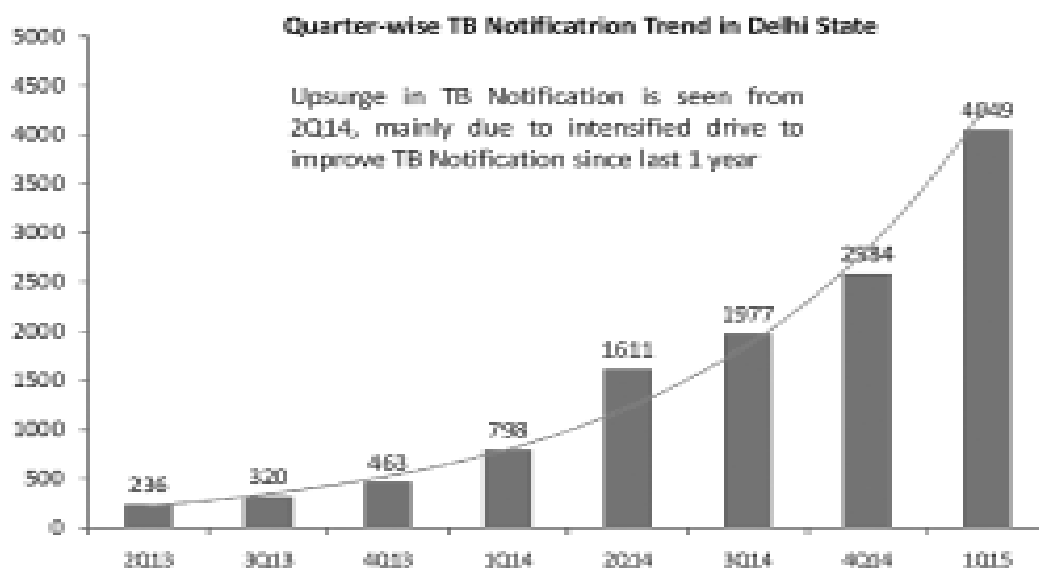
20	R.K.Mission	34	28	66	316	209	645	91	51	116	4	8
21	RTRM	28	33	72	738	535	1643	206	147	59	1	16
22	SGM	51	36	49	1208	590	2729	272	262	38	1	3
23	Shandara	44	37	56	829	468	2115	220	278	185	3	13
24	JPC Hospital	29	41	71	1118	790	3301	341	452	140	2	34
25	SPM	29	33	71	382	270	1017	138	151	26	1	6
	TOTAL	38	37	62	23555	14679	57372	6450	5919	2356	1	419

Of the total 57,372 cases, 23,555 were pulmonary TB cases. 6450 cases were relapse +TAD and 5919 were other (New +Relapse) cases. Percentage of NSP, NSN & EP cases was 62%, 38% and 37% respectively among total pulmonary cases.

Quarter –wise graphical representative of Total Case Notification rates in Delhi State



The graph shows the quarter-wise performance of the total cases notification rates in Delhi State. The upward and downward trend in case notification from first quarter 2010 to first quarter 2016 may be attributed to seasonal variation.



TB continues to be a major public health problem accounting for substantial morbidity and mortality in the country. Since May 2012, Tb has been declared as a notifiable disease. All healthcare providers involved in diagnosis and treatment of TB cases should notify information about these cases to the local health authorities. As seen in the graph, more and more practitioners are getting involved in reporting of TB cases and this is a very encouraging trend.

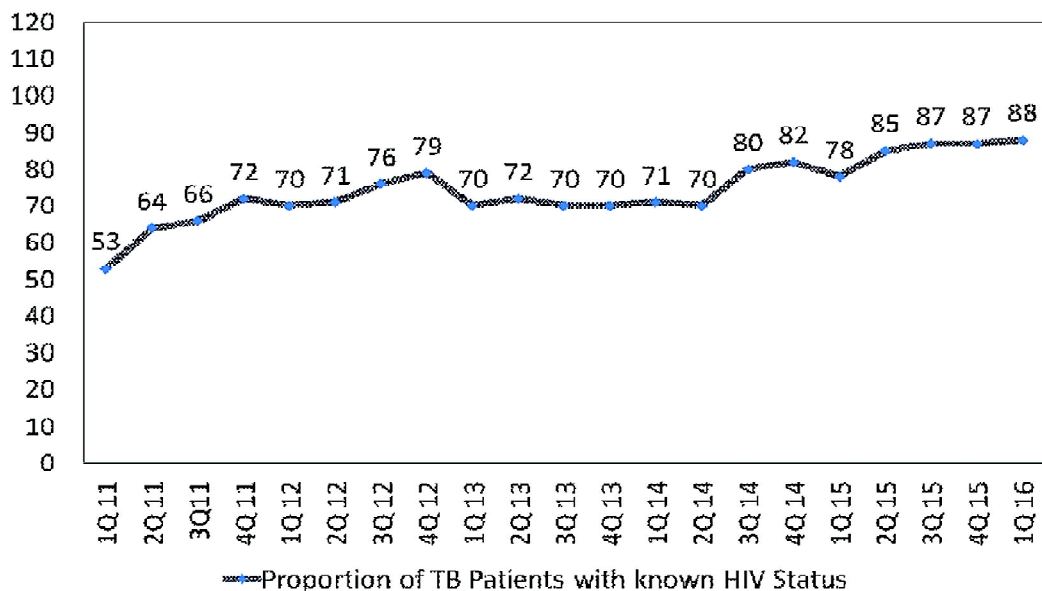
Chest Clinic wise annual performance of Delhi State: Programme Management-2015

Chest clinic	Population (in lakhs) covered	Annual previously treated case notification rate	Annual previously treated smear positive case notification rate	No (%) of pediatric cases out of all New cases	3 month conversion rate of smear positive patients	3 month conversion rate of new smear positive patients	3 month conversion rate of retreatment patients	No (%) of all Smear Positive cases started RNTCP within 7 days of diagnosis	No (%) of all Smear Positive cases registered within one month of starting RNTCP DOTS treatment	No (%) of cases (all forms of TB) registered receiving DOT through a community volunteer
BJRM	6.0	68	41	156	12	92	87	86	100	24
Bijwasan	6.0	57	34	132	11	85	84	93	100	6
BSA Rohini	7.0	76	37	276	12	88	87	98	100	0
Ch Desraj Rohini	8.0	50	28	176	12	90	87	93	100	0
DDU	12.0	56	31	358	12	90	86	93	100	11
Gulabi Bagh	3.5	47	27	70	13	89	93	90	100	0
GTBH	6.0	72	35	218	14	89	89	69	100	8
Hedgewar	4.0	37	20	95	15	89	88	93	100	1
Jhandewalan	5.0	83	42	145	16	88	83	85	100	0
KCC	7.5	52	29	151	10	91	86	97	99	1
Karawal Nagar	7.0	102	50	411	14	89	89	95	100	9
LNH	4.0	51	24	104	15	87	82	97	100	2
LRS	7.0	57	33	169	10	94	92	94	100	0
Malviya ngr	6.0	82	43	271	13	84	93	76	100	0
Moti Nagar	11.0	79	36	349	12	93	96	92	100	18
NDMC	11.0	53	27	239	11	96	93	93	100	0
Narela	6.0	87	46	208	12	88	84	93	100	7

Nehru Nagar	15.0	80	44	606	15	90	87	91	100	0
Patparganj	11.0	78	47	473	15	93	90	89	100	0
R.K.Mission	3.0	47	30	71	14	87	94	100	100	7
RTRM	7.0	50	29	110	9	90	91	94	100	11
SGM	6.0	89	45	314	14	91	90	93	100	7
Shahdara	5.0	100	44	232	14	88	83	89	93	0
JPC Hospital	7.0	113	49	482	19	88	85	91	100	15
SPM	5.0	58	28	88	12	91	97	94	100	1
TOTAL	176.0	65	32	5201	13	64	87	94	100	9

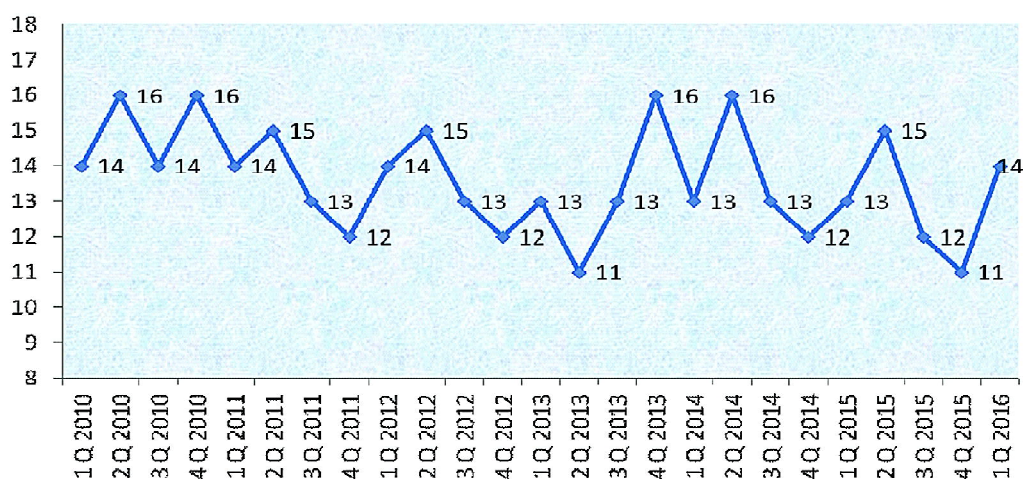
For a population of 176 lakhs, Annual previously treated case notification rate was 65/lakh/year and annual previously treated smear positive case notification rate was 32. Out of these 13% were pediatric cases. Three month conversion rate of new smear Positive (NSP) and Retreatment cases were 64% and 87% respectively. Out of total number of cases, 94% patients were put on treatment within 7 days of diagnosis and 100% smear positive cases were registered within one month of starting RNTCP DOTS programme. 9% patients were receiving DOTS through community volunteers.

Proportion of TB Patients with known HIV Status



All registered TB cases are motivated to get their HIV test done. The proportion of TB cases getting HIV test done has shown progressively increasing trend from 53% in Ist Quarter 2011 to 88% in Ist Quarter 2016.

Trend of Proportion of Pediatric cases among all New cases Delhi (1st Qtr 2010 to 1st Qtr 2016)



The proportion of pediatric cases put on treatment varies from 11% to 14%.

14. SUPERVISORY ACTIVITIES

Monitoring and evaluation is an important tool for RNTCP. As State TB Training & Demonstration Centre (STDC), the faculty of the Centre is actively involved in monitoring and supervision of the TB control programme at national and state level.

(A) State Internal Evaluation

The internal evaluation of all the chest clinics is an important activity under the RNTCP where in all aspects of the clinic records, staff, drug stores, microscopic activities, facilities and financial aspects are evaluated in detail. Internal evaluation is organized by State TB Control Department. Director of STDC or his nominee is the member of internal evaluation team for all the chest clinics of Delhi. The internal evaluation is carried out in two chest clinics of the state in every quarter. During the year 2015-16, faculty from NDTB Centre participated in evaluation of chest clinics as per the following schedule:

Faculty	Date of Visits	Chest Clinic
Dr. Shanker Matta	20/5/2015 to 22/5/2015	Narela Chest Clinic
Dr. Shanker Matta	06/7/2015 to 08/7/2015	SGM Hospital
Dr. Shanker Matta	02/9/2015 to 04/09/2015	Shastri Park Chest Clinic
Dr. Shanker Matta	21/12/2015 to 23/12/2015	Gulab Bagh Chest Clinic
Dr. Shanker Matta	10/02/2016 to 12/02/2016	GTB Hospital
Dr. Shanker Matta	8/03/2016 to 10/03/2016	Shahdara Chest Clinic

The above mentioned faculty was also involved in internal evaluation report writing.

(B) Intensified Supervisory Activity

As per Central TB Division, Government of India guidelines, the Intensified supervisory activity is conducted to improve performance of underperforming districts. State team visits the concerned district for conducting Intensified supervisory activity. The team comprised of one of the representative from STDC, STO, WHO consultant and two DTOs of good performing districts. The team visited the chest clinic, DOT Centers and DMC's. The activities observed were recorded and reports were submitted to Central TB Division.

During the year 2015-16, faculty of NDTB Centre participated in Intensified Supervision of two chest clinics as per the following schedule.

Faculty	Date of Visits	Chest Clinic
Dr. Nishi Aggarwal	22.2.2016 to 23.2.2016	Hedgewar Hospital
Dr. Nishi Aggarwal	22.5.2016 to 24.5.2016	BSA Chest Clinic

The team comprised of one of the representative from STDC, STO, WHO consultant and two DTOs of good performing districts. The team visited the chest clinic, DOT Centers and DMC's. The activities observed were recorded and reports were submitted to Central TB Division.

Supervisory Visits to Chest Clinics

Monitoring and supervision activities are implemented to ensure that activities are conducted as planned, and that the data recorded and reported is accurate and valid. It provides a feedback system for remedial action to improve performance and in turn improve the programme indicators. It also serves as a tool for continuous "on the job sensitization" of the staff and increase the involvement and commitment of the higher level authorities, both at the state and the district level.

During the year 2015-16, the following Supervisory visits were made by the doctors who gave their inputs to the improve programme performance under RNTCP:

Faculty	Date of Visits	Chest Clinic
Dr. Shanker Matta	16/4/2015 and 17/4/2015	Gulabi Bagh Chest Clinic
Dr. K.K.Chopra	22/04/2015	CCJ
Dr. Shanker Matta	14/05/2015	Narela Chest Clinic
Dr. Shivani Pawar	05/06/2015	Pili Kothi Chest Clinic
Dr. Shanker Matta	13/07/2015	Shahdara Chest Clinic
Dr.K.K.Chopra	22/07/2015	NITRD
Dr. Shanker Matta	27/07/2015	Pili Kothi Chest Clinic
Dr. Shanker Matta	24/08/2015	Malviya Nagar Chest Clinic
Dr. Shanker Matta	25/08/2015	Kingsway Camp Chest Clinic
Dr. Shivani Pawar	27/08/2015	BSA Chest Clinic
Dr. Shanker Matta	16/09/2015	Shahdara Chest Clinic
Dr. Shanker Matta	29/09/2015	Karawal Chest Clinic
Dr. Shivani Pawar	28/10/2015	SGM Hospital & Chest Clinic
Dr. Shanker Matta	15/12/2015	Moti Nagar Chest Clinic

15. LIBRARY AND INFORMATION SERVICES

The website of New Delhi TB Centre (www.ndtbc.com) has information about various facilities and activities undertaken by the Centre along with list of publications from the institute since 1940. The Centre maintains a library which has 659 books on various aspects related to tuberculosis and chest diseases. In addition, it has various National and International journals. The library renders its services to the students of MAMC and V.P.Chest Institute as well as the faculty of the Centre.

16. ADMINISTRATION

OBITUARY

Mr. Raju, who was working in this Centre as Safai Karamchhari, passed away on 8th May, 2015. May God rest his soul in peace.

(A) PLATINUM JUBILEE CELEBRATION

New Delhi TB Centre was established in 1940. It has completed 75 years of rendering services in the community for treatment, diagnosis and prevention of tuberculosis. Patients come across the country for availing the services available at Centre for tuberculosis. To mark the occasion, Centre celebrated the Platinum Jubilee with great enthusiasm. The whole week programme activities were carried out which included sports events for the staff, CME for 50 doctors as a scientific event. Finally in celebration of annual day ended by distributing the prizes for the winners of various sports events, painting and quiz competition and last not the least, a token of momentum for mark of the 75th year to the staff members and invitees on the occasion. The celebration was made with great co-operation and enthusiasm by all the members of the New Delhi TB Centre.

(B) VISITORS TO NDTB CENTRE

1. A team of representatives from CDC-USA alongwith country India representatives visited NDTB Centre on 15th April 2015. The visit was for exploring possibilities of funding for TB activities in India.
2. Dr. Alexi from GLI visited the laboratory of Centre on 27.4.2015.
3. Representatives from FIND headquarter, Dr. Pamela Nabata (Medical Officer-FIND) and Dr. Maka (Laboratory Advisor – FIND) visited NDTB Centre from 10th to 11th August 2015. The visit was regarding assessment of laboratory and clinic of NDTB Centre for feasibility of conducting the study entitled “A multicentre study of the diagnostic accuracy and feasibility of the Xpert Ultra for detection of TB and Rifampin resistance in adults suspected of having pulmonary TB”
4. A team from FIND and an international IT company visited IRL at NDTB Centre to study the feasibility of project ‘Connected Diagnostics for Tuberculosis’ to be conducted at NDTB Centre on 27th August 2015.
5. A team of experts to evaluate ‘Expand TB Programme’ visited laboratory of New Delhi Tuberculosis Centre on 17th November 2015. They observed the initiatives taken by laboratory with help of Expand TB programme and tried to assess its impact on performance of RNTCP.

(C) GRANTS

- i. During the year 2015-16, the Government of India, Ministry of Health & Family Welfare released the annual recurring grant-in-aid (Salaries) of Rs. 304 Lacs and grant-in-aid (General) of Rs. 33 Lacs.
- ii. Rs. 10,000/- was provided by Tuberculosis Association of India as annual grant.

(D) DONATIONS

Donations received (through TAI) for medicines

- (Anar Singh Chanchal Singh Memorial Fund	Rs. 13493.00
- Smt. Ram Piyari Dutt Memorial Fund	
- Donation, Interest on FDR and saving Bank Account	Rs. 46430.00
Total	Rs. 59923.00

(D) RIGHT TO INFORMATION ACT 2005

During 2015-16, 19 applications have been received under RTI Act, 2005. The table gives the details of applications received and disposed.

Table: Details of yearly Receipts & Disposal of RTI applications for 2015-16

S. No.	Month & Year	RTI Applications			Appeal			Amount of Fee Paid
		No. of RTI applications received	No. of RTI applications disposal	In Process	No. of Appeals received	No. of Appeals disposal	In Process	
1	June, 2015	2	2	Nil	Nil	Nil	Nil	Nil
2	July, 2015	1	1	Nil	Nil	Nil	Nil	Nil
3	August, 2015	2	2	Nil	Nil	Nil	Nil	Nil
4	Sept, 2015	4	4	Nil	Nil	Nil	Nil	Nil
5	Oct., 2015	2	2	Nil	Nil	Nil	Nil	Nil
6	Nov., 2015	1	1	Nil	Nil	Nil	Nil	Nil
7	Dec. 2015	2	2	Nil	Nil	Nil	Nil	Nil
8	Jan, 2016	2	2	Nil	Nil	Nil	Nil	Nil
9	Feb. 2016	3	3	Nil	Nil	Nil	Nil	Nil
Total	2015-16	19	19	Nil	Nil	Nil	Nil	Nil

17. SUMMARY OF ACTIVITIES OF NEW DELHI TB CENTRE

An insight of annual statistics of the Center are as follows:

Outpatient Attendance

New outpatients attendance	9828
Revisits	8572
Total outpatients attendance	18400

DOT Centre Attendance

New Patient put on DOTS at NDTB DOT Centre	63
Total Patients (2014-15) put on DOTS at NDTB DOT Centre	767

Special Clinics Attendance

Special clinics (TB and Diabetes, HIV and TB, COAD and Tobacco Cessation Clinic- Total New+old cases	296
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Laboratory Examinations

Total laboratory examinations	30,674
Total Smear Examination	30,674
3. Culture Examination	
(a) Solid Culture	5,311
(b) Liquid Culture	5,501
4. Drug susceptibility test	
(a) by solid culture method	224
(b) by Liquid Culture Method	964
(c) by LPA	4,928

5 CBNAATa.	
Examinations	10,006

Tuberculin skin tests

Total Tuberculin skin tests done	7718
Tests read	6925
Reactors (>10mm)	3264
Non-reactors (<10mm)	3661

Radiological Examinations

Radiological Examinations	1565
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Trainings/IRL Visits/Publications

Personnel trained	2337
Supervision and Monitoring /Internal Evaluation of Chest Clinics	22
IRL Visits to chest clinics for EQA	21
Presentations of papers in conference	7
Research and Publications	8

THAKUR, VAIDYANATH AIYAR & CO.
Chartered Accountants
New Delhi, Mumbai, Kolkata, Chennai
Patna and Chandigarh

221-223, Deen Dayal Marg, New Delhi-02
Phones : 91 - 11-2336958-60, 23237772
Fax : 91 - 11-23230831
Email : tvandeca@gmail.com
: tvande@redifmail.com

Independent Auditor's Report

To the Members of
New Delhi Tuberculosis Center,

We have audited the accompanying financial statements of **New Delhi Tuberculosis Center** which comprise the Balance Sheet as at March 31, 2016, the Statement of Income and Expenditure for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation of these financial statements that give a true and fair view of the financial position and financial performance of the Centre in accordance with the Accounting Standards, to the extent applicable, issued by the Institute of Chartered Accountants of India. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentations of the financial statements that gives a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Centre in preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, the financial statements read with accounting policies and Notes given in Schedule 17 give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:

- a) in the case of the Balance Sheet, of the state of affairs of the Centre as at March 31, 2016 and
- b) in the case of the Statement of Income and Expenditure, of the Surplus for the year ended on that date;

Report on Other Legal and Regulatory Requirements

- a) We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;

- b) In our opinion, proper books of account as required by law have been kept by the Centre so far as appears from our examination of those books;
- c) The Balance Sheet , Statement of Income and Expenditure dealt with by this Report are in agreement with the books of account;
- d) In our opinion, the Balance Sheet, Statement of Income and Expenditure comply with the Accounting Standards, to the extant applicable, issued by the Institute of Chartered Accountants of India.

For Thakur, Vaidyanath Aiyar & Co.
Chartered Accountants
FRN: 000038N

(Anil K. Thakur)
Partner
M. No. : 088722

Place: New Delhi
Date : 16 Sep. 2016

NEW DELHI TUBERCULOSIS CENTRE
BALANCE SHEET AS AT 31ST MARCH, 2016

	Schedule	As at 31.03.2016	As at 31.03.2015
		(Rs.)	(Rs.)
SOURCES OF FUNDS:			
Assets Fund	1	3,518,730	4,666,162
Earmarked Funds	2	1,392,596	1,395,348
Current Liabilities and Provisions	3	6,094,812	5,307,193
Accumulated Deficit / Surplus		194,928	(30,735)
Total		11,201,066	11,337,968
APPLICATION OF FUNDS:			
Fixed Assets	4	3,518,730	4,666,162
Current Assets, Loans & Advances	5	7,567,879	6,557,349
TDS recoverable		114,457	114,457
Total		11,201,066	11,337,968

Accounting Policies and Notes **17**
to the accounts

Schedule Nos.1 to 17 form an integral part of the Accounts

As per our report of even date attached
For Thakur Vaidyanath Aiyer & Co.
Chartered Accountants

Accountant
(S.K. Saini)

(Anil K. Thakur)
Partner
M. No. 088722

Director
(Dr.K.K.Chopra)

Chairman
(Dr. L.S. Chauhan)

Place : New Delhi
Date : 16 Sep. 2016

NEW DELHI TUBERCULOSIS CENTRE
STATEMENT OF INCOME AND EXPENDITURE FOR THE YEAR
ENDED 31ST MARCH 2016

	Schedule	For the year 2015-16	For the year 2014-15
		(Rs.)	(Rs.)
<u>INCOME</u>			
Recurring Grant from Govt.of India :			
Grant-in-aid Salaries		30,400,000	26,715,000
Grant-in-aid General		3,300,000	2,760,000
Maintenance Grants from TAI		10,000	10,000
Fees from Patients	6	452,095	474,275
Misc. Receipts:			
- Interest income		353,188	226,869
- Other receipts		30	1,020
Total		34,515,313	30,187,164
<u>EXPENDITURE</u>			
Salary & Other Staff expenditure	7	30,319,752	27,596,074
Administrative Expenses	8	3,553,712	2,282,136
Expenses on X-Ray Films, Drugs & Medicines and Lab. Consumable	9	416,186	269,904
Total		34,289,650	30,148,114
(Deficit)/Surplus for the year		225,663	39,050
Less / (Add) : Balance as per last account		(30,735)	861,281
		194,928	900,331
Transferred to Assets Fund		-	931,066
Transferred to Balance Sheet		194,928	(30,735)
Accounting Policies and Notes to the Accounts	17		

Schedule Nos.1 to 17 form an integral part of the Accounts

As per our report of even date attached
For Thakur Vaidyanath Aiyer & Co.
Chartered Accountants

Accountant
(S.K. Saini)

(Anil K. Thakur)
Partner
M. No. 088722

Director
(Dr.K.K.Chopra)

Chairman
(Dr. L.S. Chauhan)

Place : New Delhi
Date : 16 Sep. 2016

**NEW DELHI TUBERCULOSIS CENTRE
RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR
ENDED MARCH 31, 2016**

		Schedule For the Year 2015-16	For the Year 2014-15
RECEIPTS		Rs.	
Opening Cash & Bank Balances	5	6,420,045	6,464,426
Grants :			
Recurring Grant-in Aid from Govt. of India			
- Grant-in-aid Salaries		30,400,000	26,715,000
- Grant-in-aid General		3,300,000	2,760,000
Maintenance Grants from TAI		10,000	10,000
Fee from Patients	6	444,545	474,175
Receipts from TAI	10	2,062,363	7,637,716
Other Receipts	11	1,813,428	2,296,335
Total		44,450,381	46,357,652
PAYMENTS			
Staff Expenditure	12	30,250,711	28,338,694
Administrative expenses	13	3,626,918	3,557,150
X-Ray films, Drugs and Med. & Lab. Consumables	14	491,757	238,903
Payments from TAI Fund	15	2,062,363	7,637,716
Other Payments	16	622,370	165,144
Closing Cash & Bank Balances	5	7,396,262	6,420,045
Total		44,450,381	46,357,652
Policies and Notes to the Accounts	17	-	-

Schedule Nos.1 to 17 form an integral part of the Accounts

As per our report of even date attached

For Thakur Vaidyanath Aiyer & Co.

Chartered Accountants

Accountant

(S.K. Saini)

(Anil K. Thakur)

Partner

M. No. 088722

Director

(Dr.K.K.Chopra)

Chairman

(Dr. L.S. Chauhan)

Place : New Delhi

Date : 16 Sep. 2016

NEW DELHI TUBERCULOSIS CENTRE

Schedule- 1

ASSETS FUND

	As at 31.03.16	As at 31.03.15
	<u>(Rs.)</u>	<u>(Rs.)</u>
Balance as Per last A/c	4,666,162	4,369,749
Add : Additions during the year for Cost of Assets Acquired (refer Schedule-4)	- 482,537	- 973,366
	<u>5,148,699</u>	<u>5,343,115</u>
Less:		
Disposals during the year	1,161,239	-
Depreciation for the year (refer Schedule-4)	468,730	676,953
Total	<u>3,518,730</u>	<u>4,666,162</u>

NEW DELHI TUBERCULOSIS CENTRE

	Unutilised Balance as on 01.04.15 (Rs.)	Received / Transferred during the year (Rs.)	Interest (Rs.)	Total (Rs.)	Utilised during the year (Rs.)	Unutilised Balance as on 31.03.16 (Rs.)
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Schedule - 2

EARMARKED FUND

General Donations	279,643	10,000	46,430	336,073	-	336,073
Auditorium fund	154,100	49,199	-	203,299	88,406	114,893
For Poor Patients	56,566	-	-	56,566	-	56,566
For Medicines	326,609	13,493	-	340,102	36,692	303,410
Staff Welfare Fund	79,830	-	3,224	83,054	-	83,054
Research Fund	498,600	-	-	498,600	-	498,600
Total	<u>1,395,348</u>	<u>72,692</u>	<u>49,654</u>	<u>1,517,694</u>	<u>125,098</u>	<u>1,392,596</u>

NEW DELHI TUBERCULOSIS CENTRE

	As at 31.03.16	As at 31.03.15
	<u>(Rs.)</u>	<u>(Rs.)</u>
<u>Schedule- 3</u>		
<u>Current Liabilities & Provisions</u>		
Advance Fee & Lab Charges	3,160	10,710
Salary & Allowances	2,478,599	2,123,117
Bonus	89,653	93,094
Other Payable	61,968	116,345
Wages to temp. staff	-	22,746
Sundry Creditors	121,897	155,916
Provision for Contribution to Gratuity Fund	412,000	695,000
Security Deposit	22,344	49,199
Earnest Money	-	10,000
Payable to PWD for Electrical Instalation	-	31,066
Unspent Project Fund -SMS for Sure	1,573,953	2,000,000
Unspent Project Fund -Acceleration of TB notification	221,075	-
Unspent Project Fund -Framework of Tb care in prison	241,500	-
Unspent Project Fund -Genetic Polymprphism	30,000	-
Unspent Project Fund -Xpert Ultra	838,663	-
	<u>6,094,812</u>	<u>5,307,193</u>
Total		

NEW DELHI TUBERCULOSIS CENTRE

Schedule - 4

Fixed Assets

	WDV	Additions	Disposals	Balance	Depreciation	Net
	as on	during the year		as on	for the year	balance
	01.04.15			31.03.16		on
	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
Building	273,296	-	-	273,296	27,330	245,966
Electrical Installations and Sanitary Fittings	944,564	-	60,051	884,513	88,451	796,062
Furniture & Fittings	711,065	482,537	30,077	1,163,525	81,599	1,081,926
Lab. Equipments	1,757,260	-	1,007,572	749,688	112,453	637,235
X-ray Equipments	658,099	-	-	658,099	98,715	559,384
Other Equipments	22,056	-	-	22,056	3,308	18,748
Computer	47,314	-	-	47,314	28,388	18,926
Books	314	-	-	314	188	126
Vehicle	252,194	-	63,539	188,655	28,298	160,357
Total	4,666,162	482,537	1,161,239	3,987,460	468,730	3,518,730

NEW DELHI TUBERCULOSIS CENTRE

	As at 31.03.16		As at 31.03.15	
	(Rs.)		(Rs.)	
<u>Schedule- 5</u>				
<u>Current Assets & Loans and Advances</u>				
Stocks and Stores at cost :				
(as valued and certified by the Management)				
-X-Ray films and chemicals	4,613		16,091	
-Laboratory stains, chemicals	118,315	122,928	79,813	95,904
glassware	46,800		41,400	
Festival Advance				41,400
Universal Comfort Products Ltd	1,889			-
<u>Cash and Bank Balances:</u>				
Cash in hand		290		2,410
(as certified by the Management)				
In Current A/c with BOI	6,081,388		5,041,100	
In Saving Bank				
- with BOI	1,231,530		1,296,705	
(Earmarked donation fund)				
- with BOI	83,054	7,395,972	79,830	6,417,635
(Staff Welfare Fund)	7,567,879		6,557,349	
Total		7,567,879		6,557,349

NEW DELHI TUBERCULOSIS CENTRE

	Advance Fee as on 01.04.15	Fee Received During the year	Add: Advance fee adjusted During the year	Fee for the year 2015-16	Advance as on 31.03.2016
	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
<u>Schedule-6</u>					
<u>Advance Fees for patients</u>					
Laboratory charges	10,710	435,200	7,550	442,750	3,160
X-ray charges	-	9,345	-	9,345	
Total	10,710	444,545	7,550	452,095	3,160

NEW DELHI TUBERCULOSIS CENTRE

	For the year 2015-16	For the year 2014-15
	(Rs.)	(Rs.)
<u>Schedule- 7</u>		
<u>Salary & Other Staff Expenditure :</u>		
Salaries	10,850,949	9,742,691
Dearness Allowance	11,142,854	9,422,355
House Rent Allowance	2,774,027	2,685,035
Transport Allowance	1,720,282	1,628,041
Other Allowances	600,186	649,643
Children's Education Allowances	343,252	364,630
Contribution to Provident Fund	2,152,950	1,874,728
Contribution to Gratuity Fund	412,000	695,000
Bonus	89,653	93,094
Travel Concession	233,599	440,857
Total	30,319,752	27,596,074

NEW DELHI TUBERCULOSIS CENTRE

	For the year 2015-16	For the year 2014-15
	<u>(Rs.)</u>	<u>(Rs.)</u>
<u>Schedule- 8</u>		
<u>Administrative Expenses :</u>		
Wages to Contractual staff	823,625	630,785
Wages to Temporary staff	95,288	270,483
Security Charges	533,868	492,786
Staff Uniform	10,834	17,536
Medical Aid to staff	248,468	221,723
Travelling Expenses & Conveyance	48,865	47,571
Repairs to Furniture and equipment	85,244	58,346
Repairs to X-ray equipments	36,042	32,517
Repairs to Laboratory equipment	34,738	16,240
Telephone Expenses	131,290	124,588
Printing & Stationery	90,360	87,607
Postage	3,825	3,340
Laundry Charges	3,298	3,821
Books & Journals	-	530
Maintenance of car	39,184	26,711
Audit Fee	24,255	23,940
Miscellaneous expenses	95,393	88,357
Advertisement	-	18,340
Building maintenance expenses -civil	546,359	16,223
Annual day expenses	195,799	21,492
Legal expense	22,550	79,200
Linen and bedding	1,890	-
Furniture	482,537	-
Total	<u>3,553,712</u>	<u>2,282,136</u>

NEW DELHI TUBERCULOSIS CENTRE

		For the year 2015-16	For the year 2014-15
		<u>(Rs.)</u>	<u>(Rs.)</u>
<u>Schedule- 9</u>			
<u>X-Ray Films ,Drugs and Medicines & Lab. Consumable</u>			
Drugs and Medicines			
Balance as on 1.4.2015	-		
Add : Purchased during the year	48,150		
	<hr/>		
Less : Closing Stock	-	48,150	35,233
	<hr/>		
X-Ray Films and Chemicals			
Balance as on 1.4.2015	16,091		
Add : Purchased during the year	90,365		
	<hr/>		
	106,456		
Less : Closing Stock	4,613	101,843	56,557
	<hr/>		
Lab. Stains, Chemicals & Glassware			
Balance as on 1.4.2015	79,813		
Add : Purchased during the year	304,695		
	<hr/>		
	384,508		
Less : Closing Stock	118,315	266,193	178,114
	<hr/>		
Materials Consumed	Total	<hr/> 416,186 <hr/>	<hr/> 269,904 <hr/>

NEW DELHI TUBERCULOSIS CENTRE

	For the year 2015-16	For the year 2014-15
	(Rs.)	(Rs.)
<u>Schedule- 10</u>		
<u>Receipts from TAI</u>		
For PF Advances	772,000	6,232,000
For Gratuity Payments	335,054	529,500
For PF Payments	955,309	876,216
Total	2,062,363	7,637,716
<u>Schedule - 11</u>		
<u>Other Receipts</u>		
Recovery of Festival Advance	62,100	62,500
Donations for Medicines	13,493	13,859
Staff Welfare Fund	3,224	3,169
Interest on FFD A/c	353,188	181,544
Interest on Saving A/c (Earmarked Fund)	46,430	23,243
General Donation	-	1,000
Miscellaneous Receipts	30	1,020
Earnest money	-	10,000
Project-SMS for sure		2,000,000
Project-Genetic Polymorphism	30,000	-
Project-Acceleration of TB notification	224,800	-
Project-Framework of TB.care in prisons	241,500	-
Project-Xpert Ultra	838,663	-
Total	1,813,428	2,296,335

NEW DELHI TUBERCULOSIS CENTRE

	For the year 2015-16	For the year 2014-15
	(Rs.)	(Rs.)
<u>Schedule- 12</u>		
<u>Staff Expenditure</u>		
Salaries	10,838,531	9,734,289
Dearness Allowance	10,867,447	9,510,445
House Rent Allowance	2,762,539	2,682,890
Transport Allowance	1,699,587	1,643,269
Other Allowances	595,399	647,497
Children's Education allowance	343,252	364,630
Contribution to Provident Fund	2,123,277	1,882,877
Contribution to Gratuity Fund	695,000	1,338,000
Bonus	92,080	93,940
Travel Concession	233,599	440,857
Total	30,250,711	28,338,694

NEW DELHI TUBERCULOSIS CENTRE

Schedule- 13	For the year 2015-16	For the year 2014-15
	(Rs.)	(Rs.)
<u>Administrative Expenses</u>		
Wages to Contractual staff	798,447	637,321
Wages to Temporary staff	118,034	270,682
Security Charges	530,905	489,468
Staff Uniform	10,834	17,536
Medical Aid to staff	248,468	221,723
Travelling Expenses & Conveyance	48,865	47,571
Repairs to Furniture and equipment	85,244	58,346
Repairs to X- Ray equipment	36,042	32,517
Repairs to Laboratory equipment	35,755	15,223
Telephone Expenses	129,790	123,000
Printing & Stationery	90,360	91,307
Postage	3,825	3,340
Laundry Charges	3,298	4,969
Books & Journals	-	530
Maintenance of car	41,217	28,082
Audit Fee	24,045	22,472
Miscellaneous expenses	95,393	88,357
Advertisement	-	18,340
Building maintenance -civil	534,015	464,874
Building maintenance -Electrical	31,066	900,000
Annual day expenses	195,799	21,492
Furniture	484,426	-
Legal expenses	79,200	-
Linen and bedding	1,890	-
Total	3,626,918	3,557,150

NEW DELHI TUBERCULOSIS CENTRE

	For the year 2015-16	For the year 2014-15
	(Rs.)	(Rs.)
<u>Schedule- 14</u>		
<u>X-Ray Films, Drugs and Medicines & Lab. Consumable</u>		
X-Ray Films and Chemicals	103,462	44,476
Drugs and Medicines	48,150	35,233
Laboratory Stains and Chemicals	340,145	159,194
Total	491,757	238,903
<u>Schedule- 15</u>		
<u>Payments from TAI Fund</u>		
PF Advances	772,000	6,232,000
Gratuity Payments	335,054	529,500
PF Payments	955,309	876,216
Total	2,062,363	7,637,716
<u>Schedule- 16</u>		
<u>Other Payments</u>		
Festival advance	67,500	67,500
Earnest money	-	12,999
General donation	-	42,300
Staff Welfare Fund	-	2,500
Donation fo medicines	36,692	39,845
Auditorium funds	88,406	
Ptoject-SMS for sure	426,047	-
Project-Acceleration of TB notification	3,725	-
Total	622,370	165,144

NEW DELHI TUBERCULOSIS CENTRE

Annexure 1 (for the year ended 31st March 2016)

	Grant-in-aid Salaries	Grant-in-aid General
	(Rs.)	(Rs.)
INCOME		
Opening Deficit (01.04.15)	(86,923)	56,188
Grant-in-aid from Govt.of India	30,400,000	3,300,000
Maintenance Grants from TAI	-	10,000
Fees from Patients	-	452,095
Interest income	-	353,188
Other receipts	-	30
Total	30,313,077	4,171,501
 <u>EXPENDITURE</u>		
Salary & Other Staff expenditure	30,319,752	-
Administrative Expenses	-	3,553,712
Expenses on X-Ray Films, Drugs & Medicines and Lab. Consumable	-	416,186
Total	30,319,752	3,969,898
Surplus/(Deficit)	(6,675)	201,603
Total Surplus/Deficit as on 31.03.3016		194,928

NEW DELHI TUBERCULOSIS CENTRE

Schedule – 17

Significant Accounting Policies and Notes to Accounts

A. Significant Accounting Policies :

1. Accounting Convention :

The Financial Statements have been prepared on accrual basis (except as specifically stated) and under the historical cost convention, and in accordance with the generally accepted accounting principles in India.

2. Use of Estimates:

The preparation of the Financial Statements in conformity with GAAP in India requires management to make estimates and assumptions, wherever necessary, that affect the reported amount of assets and liabilities and contingent liabilities as at the date of financial statements and the amount of revenue and expenses during the year. Actual results could differ from those estimates. Any revision to such estimates is recognized in the year in which the results are known / materialized.

3. Revenue Recognition :

Income & Expenditures have been accounted for on accrual basis except for leave encasement.

4. Fixed Assets & Depreciation:

- a) Fixed Assets are stated at cost, Assets received as donation from various organisations are stated at estimated market value on the date of donation.
- b) Centre has started charging Depreciation from the Financial Year 2011-12 on its Fixed Assets as per rate prescribed under Income Tax Act, 1961. Further, Depreciation has been debited to the Assets Fund created at the time of purchases of such Assets.
- c) Purchase of capital items less than Rupees five thousand are not capitalized.

5. Inventories :

Laboratory stains, chemicals and glassware and x-ray films & chemicals are valued at purchase price following FIFO method (Refer Note No. 3).

6. Gratuity :

Liability for future payments of Gratuity has been provided for as per the rules of Tuberculosis Association of India (TAI) and said Gratuity Fund is also maintained by TAI.

7. Provident Fund :

As per rules of Tuberculosis Association of India (TAI), accounts relating to Provident Fund of the staff of the Centre have been maintained by the Tuberculosis Association of India (TAI).

8. Interest Incomes :

Interests earned on the Investments of Earmarked Funds have been credited directly to such Fund instead of Income & expenditure Account.

B. Notes to Accounts

1. Electricity and water expenses have not been charged in the Income & Expenditure Account as the electricity and water supply is through Lok Nayak Hospital for which demand has not yet been raised. Further, in absence of any demand/s, provision has also not been made for the same.
2. Title deed of the land on which Buildings are situated is not available.
3. Cost / Value of stock are as valued and verified by the Management.
4. In absence of PAN, Bank is deducting TDS on interest at higher rate than the normal rate of TDS i.e. @ 20%. However, the Centre is in the process of obtaining the PAN so that refund of TDS can be claimed.
5. Previous year's figures have been regrouped / rearranged wherever considered necessary.

Accountant
(S.K. Saini)

Director
(Dr. K.K. Chopra)

Chairman
(Dr. L.S. Chauhan)

Place: New Delhi

Date: 16 Sep. 2016







