Participants from Medical Colleges, State TB Officers, Central TB Institutes (TRC, NTI, and LRS), WHO-India and Central TB Division attended the fourth annual meeting of the National Task Force for involvement of Medical Colleges in the RNTCP. List of participants in each group is at Annex 1. For the first time, this meeting was preceded by a CME on the 3rd November 2005. A side meeting of the NTF members was also held on 4th November 2005.

GROUP WORK RECOMMENDATIONS

Participants deliberated on various topics assigned to them for the group work. Following are the recommendations of the various working groups as finalized in the NTF:

Group 1: Sensitization Programme for faculty of Medical Colleges

Participants (Target group)
- The target group would be faculty members (including HODs), medical officers, resident doctors and PG students of medical colleges
- For interested participants, sensitization programme to be supplemented with 5 day / 12 day modular training

Learning objectives
At the end of the sensitization, participants are expected to know:
- RNTCP Objectives
- Diagnostic algorithm
- Scientific basis of DOTS
- Treatment categories and categorization, including treatment of TB in special situations
- Functioning of RNTCP in the Medical College set up (Out door DOTS, Indoor DOTS, DMC-DOT centre, Referral for treatment and transfer out mechanisms, training and OR)

Contents of the training
- Case definition and Type of cases
- Diagnostic Algorithm
- Sputum Microscopy
- Treatment, including treatment categories, follow-up of patients and side effects, counseling of patients, action for patients who interrupt treatment, type of DOTS provider and outcome
- Paediatric TB
- Treatment of TB/HIV
- Extra-pulmonary TB
- Special situations (including hospitalization, TBM, TB in pregnancy, TB in children, MDR-TB and DOTS PLUS)
- Key indicators (NSP Case detection rate, Cure rate, etc.)
- ARTI and expected number of cases
- RNTCP service delivery structure
- Drugs – quality and logistics
- RNTCP Implementation in Medical College

Methodology of Sensitization
- “Training module for Medical Practitioners” supplemented by ‘RNTCP at a glance’ and selective portions of “Managing RNTCP in your area - A training course – module 1- 4” and recommendations of NTF meetings will be used.
- Imparted using LCD / OHP* Presentations.
- A set of standardized slides to be made available in a CD.
- It would be a one-day sensitization, total duration about six hours.
*In Medical Colleges where LCD projectors are not available, OHP slides will be used which will be prepared with the support of DTCS.

The presentations would include

1. Introduction (30 mins)
   - Global and National scenario
   - Evolution from NTP to RNTCP
   - Objectives of RNTCP and DOTS strategy
   - Structure of RNTCP
   - Achievements of RNTCP
   - Role of medical colleges in RNTCP
2. Diagnosis (45 mins)
   - TB Suspect
   - Sputum examination
   - Significance of sputum microscopy and Chest X-Ray
   - Diagnostic algorithm
   - Diagnosis in EP TB
   - External Quality Assurance (EQA) for sputum microscopy
3. Scientific Basis of DOTS (45 mins)
   - Domiciliary treatment
   - Short course chemotherapy
   - Intermittent chemotherapy and its advantages
   - Directly observed treatment
4. Treatment (1 hr)
   - Case definitions
   - Categories and categorization, including dosages for Pulmonary and EP TB
   - Patient flow for DOT (including action taken for missed doses)
   - Special situations
   - Case scenario and interactive session with examples
5. Pediatric TB (30 mins)
6. TB/HIV (30 mins)
7. RNTCP patient management in a medical college (30 mins)
8. Discussion on practical issues (1 hr)

Operational strategy of Sensitization
- Funding – local DTCS
- STF to give directive to Medical college core committees and the invitation for sensitization to be sent by the Principal / Dean
- All the faculty of the Medical college have to be covered in one year
- Honorarium for participants to be given as per rules
- Facilitators will be Medical College Faculty, district TB Officer, State TB Cell, Statet TB Training & Demonstration Centre, State Task Force. They must be trained at National level (TOT)/ state level.

- 4-5 Trainers should be available for every medical college which will help in smooth conduct of sensitization process

- For interested participants, a 5 days modular training can be organized at DTC. If required help can be taken from STDC.

Summary

- Sensitization is not a substitute for training.
- Sensitization will be of one day duration, approx. 6 hrs
- "Training module for Medical Practitioners” supplemented by ‘RNTCP at a glance’ and selective portions of “Managing RNTCP in your area - A training course – module 1- 4” and recommendations of NTF meetings will be used.

- Persons to be sensitized will be faculty members (including HODs), medical officers, resident doctors and PG students of Medical Colleges
- Objectives, contents and methodology of training – as above
- Presentation material to be compiled by NTF/CTD and provided to medical colleges in CD. It would be updated on a yearly basis by NTF/CTD.

- This CD could also include relevant articles supporting DOTS and RNTCP.

Group 2: Reporting Formats for Medical Colleges:

- **Periodicity of Reporting:** Consequent to the decision in the earlier NTF held in November 2004, NTF 2005 has recommended that Medical Colleges, States and Zones shall submit reports to the next level on a quarterly basis

- **Time lines for reports:** Such reports shall be sent from the Medical College level by the Medical Colleges to the State Task Force by the 7th of the month following the end of the quarter, and from the STF to ZTF by the 20th, and thereafter by the ZTF to the NTF by the 30th of the month.

- **Officer Responsible:** At the Medical College level, the Nodal Officer/Contact person shall be responsible for verifying, signing and dispatching the reports. At the STF/ZTF level, the Chairpersons shall verify, sign and dispatch the reports.

- **Secretarial/Data Entry support:** Contractual staff made available to Medical Colleges shall help compile the required data for the Medical College reports. Wherever necessary, the DTO of the district where the Medical College is located shall provide data entry support to the Nodal Officer of the College Core Committee. For the STF, the STO’s office shall provide such support. For ZTF, the nodal centres of the Zone have been equipped with computer, internet and DEO.

- **Formats:** Standardized formats for reporting by Medical Colleges and by the STF and ZTF were finalized and adopted at the NTF.
Group 3: Referral for treatment mechanism

The 3rd NTF meeting in 2004 had recommended the protocol for out-patient case management in medical colleges. The Referral for treatment mechanism is an important part of this process.

A pilot was conducted in 2 States of Gujarat and Rajasthan which revealed that RNTCP referral for treatment mechanism is feasible to implement. Over 3000 TB patients were successfully referred out for treatment from 5 medical colleges in Rajasthan during Feb-Apr 2005 and over 500 TB patients were successfully referred out for treatment from 5 medical colleges in Ahmedabad Municipal Corporation during Jan-Apr 2005. However, only in a small proportion of patients feedback was received from districts. Majority of the cases referred were within the same State. But, wherever referrals were made outside the State the feedback was even poorer.

The group recommended the following to improve the referral for treatment mechanism and the feedback process:

- As the medical colleges are diagnosing large numbers of TB patients the referral for treatment should start in all medical colleges and the feedback for such referrals should be given priority by RNTCP.
- Training should be done for all staff receiving referral for treatment forms (DTC, TU, PHI staff) and also for all concerned Medical College staff.
- The 3 forms, A, B & C, should be retained (A – patient-held form; B – form sent to PHI by post; C- form sent to DTC by post).
- Printing of ‘referral for treatment’ forms and register should be done at State level and supplied to the medical colleges.
- Forms should be of thick paper (card quality) with RNTCP logo and perforation on it.
- Franking should be done for postal fee and the address of the medical college should be stamped on the back of the card.
- A robust system for monitoring of ‘referral for treatment’ should be implemented. Such a system should include:
  - Monthly meeting, at DTC of the district, with medical college, which should be attended by MO of the medical college and all STS of the district. The MO should bring the list of patients, sorted TU-wise, District-wise and State-wise, who are referred out and whose feedback regarding start of Rx is not received for >10 days. The STSs should bring their TB register.
  - The patients within the district should be tracked by STSs and the list of the patients referred outside the district should be emailed to the respective DTO and feedback obtained. The list of patients outside the State should be emailed to the STO and feedback obtained. Feedback of such cases to be provided by the DTO in the next monthly meeting.
- MO medical college post should be filled up. The MO should be responsible for filling up ‘referral for treatment’ form and register and produce list of patients for whom feedback has not been received, and communicate it to the DTO.
- DMC at medical college should develop a system for feedback to referring departments within the medical college.
- Patients referred for treatment should be considered missing only after 45 days (7 days for start of treatment, 30 days for registration and 8 days for postal transit)
The STF should monitor ‘referral for treatment’ for all medical colleges.

- Referral and feedback should be included in the quarterly reporting format of medical colleges to STF.
- STF should monitor for each medical college quarterly
  - No. of patients diagnosed
  - No. (%) referred for treatment
  - No. (%) received feedback (of those referred in previous quarter).

Group 4: Operations research:

The group discussed the generic protocol for TB lymphadenopathy developed in the North and South ZTF workshops, pleural effusion protocol drafted by AIIMS and a data collection tool to be circulated to all medical colleges to document RNTCP activities in medical colleges. TB lymphadenitis and pleural effusion were chosen as topics for the generic protocol as they are the more common forms of extra-pulmonary TB.

Recommendations made on the various task undertaken by the group is summarized as follows:

**Generic protocol for EPTB - Tuberculosis Lymphadenopathy**

The RNTCP diagnostic algorithm for TB lymphadenitis recommends 2 weeks of antibiotics to patients presenting with lymph node enlargement before subjecting them to FNAC. The proposed study would examine if immediate FNAC improves diagnostic efficacy in case of TB lymphadenitis over FNAC after two weeks. In addition, the study would examine the outcome of treatment under RNTCP strategy and follow up the patients for two years to assess the response.

**Generic protocol for Pleural effusion study**

There is limited data from India on the efficacy of thrice weekly ATT regimen in the treatment of tubercular pleural effusion. This study would be undertaken to examine the efficacy of thrice weekly ATT regimen as used under the RNTCP. Comments on the proposed study included the sample size, randomization process and the necessity to have one arm with patients on daily regimen. As consensus could not be reached, it was decided that CTD will take the final decision in consultation with the NTF.

Both studies would be prospective randomized control study to be undertaken in multiple medical colleges with adequate infrastructure and willingness to participate.

Follow-up actions:

1. A small writing committee would be formed to write up both the proposals, including development of required proformas and budget estimation. This will be circulated for comments and finalized in a meeting at CTD. Suitable medical colleges would be identified to coordinate and participate in the study.
2. Data collection format to be finalized and circulated to all medical colleges by NTF in consultation with CTD, after incorporation of all comments made at the NTF meeting (e.g. inclusion of laboratory and QA information for DST, time lag for treatment outcome information, etc). The data collection sheet should be circulated with an instruction sheet defining and explaining the information being asked.
Simultaneously, the objectives and methodology of the study should be drafted in the form of a protocol. Data derived from this would be analysed for publication. All contributors would be included as authors for the paper.

**Group 5: Operationalisation of RNTCP activities in Medical Colleges**

The objectives of the group work was to - identify the means and methods to operationalise the guidelines for Medical Colleges’ involvement in RNTCP and prepare a time-plan for the same. The group came to the consensus that for the NTF, ZTF and STF, the guidelines prepared in the NTF meeting of 2003 were appropriate for all their activities and recommended that the same are to continue. However, further guidelines for operationalisation were required for activities in the Medical Colleges. The group broadly grouped action required in the state/Medical College for operationalisation of RNTCP under the following heads: Initial ground work, Diagnostic activities, Treatment Initiation, Monitoring and Operational Research.

a) Initial Ground work: Action by the Medical Colleges/ STO:

<table>
<thead>
<tr>
<th>Action</th>
<th>Time frame</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Letter from DME asking all Medical Colleges to form Core Committee and to place all patients on RNTCP regimens</td>
<td>At the earliest</td>
<td>STF Chairman/ STO</td>
</tr>
<tr>
<td>2. Formation of Core Committee</td>
<td>By end Dec 2005</td>
<td>STF Chairman/ STO</td>
</tr>
<tr>
<td>3. Identification of site for DMC – in all colleges where it does not exist</td>
<td>At the earliest</td>
<td>Core Comm. Chairman</td>
</tr>
<tr>
<td>4. Establishment of DMC in such colleges</td>
<td>By 31 Mar 06</td>
<td>DTO</td>
</tr>
<tr>
<td>5. Contractual staff recruitment</td>
<td>At the earliest</td>
<td>DTO</td>
</tr>
<tr>
<td>6. Sensitisation of Core Committee members as per previous recommendations</td>
<td>By 30 Apr 06</td>
<td>STF Chairman/ STO</td>
</tr>
<tr>
<td>7. Training of contractual staff as soon as they are appointed</td>
<td>By Mar 06</td>
<td>Core Committee Chairman/ DTO</td>
</tr>
</tbody>
</table>

Functions of the Core Committee:

- A change in frequency of meetings was suggested: Meetings may be held quarterly (instead of monthly) - within the first two weeks of every quarter. The minutes should be kept/ filed in a register (Minutes may be checked by STF/ ZTF during visits). However, the group has finally recommended the continuation of 2003 guidelines, as above, which is for monthly meetings.
- Sensitization/ trainings – for faculty, residents and nurses to be set down as a training calendar by 31 March 2006 for the next six months ahead, preferably to be completed as early as possible. Core Committee meeting will review this training.
• Update the constitution of Core Committee by replacing members in older Core Committees, by next quarter, wherever required (Mar 2006).
• Core Committee should inform the action plan for the next year to the DTCS by 30 Sept of every year, so that DTO can incorporate it into the District Action plan (Guidelines may be sent by CTD to Core Committees as to how to prepare the action plan).
• Establish Linkages with DTCS: DTO has to visit Medical college once a month; Core Committee Chairman/ member should be member of DTCS; All DTCS should communicate the relevant RNTCP financial guidelines (training, contractual staff, meetings etc) to Medical College Core Committees.

b) Diagnostic Activities:
• Placing of DMC: DMCs should be at a convenient place close to the OPD block, where most chest symptomatics converge, so as to minimize inconvenience to patients and to minimize initial default.
• Ensure that all OPDs refer TB suspects to Microscopy Centre: Head of the Institution should be advised by DME that all TB patients, including extra-pulmonary patients should be registered under RNTCP, unless reasons are given (serious cases). Sending a circular from Principal/Superintendent/ Dean to all Departments advising them to send TB suspects/ TB patients to the DMC for diagnosis/ initiation on DOTS would facilitate the same.
• Lab forms should be made available in all OPDs (by CC Chairman).
• How to give feedback to referring doctor: MO - DMC of Medical College / TBHV of Medical College, as applicable, will do the follow-up and will send a feedback to the referring unit/ concerned physician/ surgeon for patients referred within the district. For referrals outside the district, DTO will be responsible
• Medical Colleges with mycobacterial culture/sensitivity facilities may try for accreditation under RNTCP

c) Treatment Initiation
• The referring physician/MO/ MO-DMC (after due RNTCP training) shall categorize TB patients as per the RNTCP guidelines.
• Treatment initiation as per RNTCP guidelines.
• In-patients should be put on Prolongation pouches. TBHV daily checks the admission register from the 4 or 5 concerned departments (Medicine, Gynae, Ortho, Paediatrics) and makes a note of TB patients admitted. It is the responsibility of the admitting unit to refer the case to the RNTCP centre. MO-DMC will assist the Physician in initiating treatment using RNTCP drugs. For indoor TB patients, RNTCP Prolongation Pouches should be used and the same will be supplied by the DTO. The patients should be registered in the local TU and ‘transferred out’ on discharge.
• Those drugs supplied by RNTCP should not be procured by states/ Medical Colleges
• All proven EP-TB should also be referred to MO of the DMC cum DOT Centre at the medical college. All concerned departments should be actively involved.
• Referral forms and Referral Register made available by RNTCP will be filled by the MO of DMC at Medical College. Wherever possible e-mail correspondence additional to the hard copy should be encouraged to ensure feedback on referral.
• DTOs should ensure that feedback is provided to Medical Colleges on patients referred out for treatment initiation
• Treatment should not be initiated for OP cases at Med. Colleges (to be referred), except for local patients. Referral for other cases is to be strengthened.
d) Monitoring
- Maintain referral register (Responsible - MO-DMC)
- Monthly PHI report has to be filled by MO of DMC at medical college under the overall responsibility of the nodal person identified by the Core Committee and sent to DTC.
- Proper use of contractual staff; involvement of TBHVs in data collection and feedback mechanism
- Quarterly Core Committee meetings to review RNTCP activities related to
  - Diagnosis by adherence to RNTCP algorithm,
  - Referral by all concerned departments – keep a record. Wherever it is deficient, action to be taken
  - Feedback on diagnosis/ treatment
  - Treatment Initiation on DOTS
  - Follow up
  - Complicated cases

e) Operational Research
- CMEs should be organized on regular basis
- The Core Committee will suggest a list of OR topics, based on RNTCP OR agenda (available on website)
- Faculty, PGs will be encouraged to take up topics of their choice from the list
- Core Committee will review the proposals, decide its worth and forward it with recommendations to the STF
- STF Chairman, in consultation with STO will decide the merit of the proposal and immediately forward it to the appropriate level. 2003 NTF recommendation on screening and review of OR proposals by STF during 3 monthly meetings may be changed from review during STF meeting to email review immediately on receipt (To reduce time-lag it is suggested that the STF does not have to meet for clearing the proposal. The proposal is to be circulated via email by STF Chairman to the members and email concurrence may be given by members. STF Chairman to co-ordinate to avoid delays. Sanction or go-ahead for the proposal will be communicated to the concerned Core Committee by STO.) (This aspect has been further clarified in OR Guidelines issued separately by CTD).
- Selection of PG thesis for funding from RNTCP would be decided by the STF in consultation with the Core Committee, Chairpersons.
During the meeting of the members of the National Task Force on 4th November 2005, the following recommendations were made:

1. **Listserv (group) email ID**: To improve communication amongst NTF members and the Zonal Task Forces, a listserv (group) email ID of NTF members would be created by CTD and all concerned would be informed of the same. The members will be able to post messages to all the members of the group by sending an email to ntf@tbcindia.org or a similar group address.

2. **Regular visits by NTF to ZTF**: To strengthen involvement of Medical Colleges in RNTCP, regular visits by NTF to ZTF would be undertaken. The NTF would prepare a tour programme based on the activities planned by the ZTF. Poorly performing states would be prioritized for visits by NTF.

3. **Rotation of Chairpersons of STF and ZTF**: In concurrence with the 2002 NTF workshop recommendations, the position of ZTF chairperson for the West zone would be rotated for the next two years, after the West zone meeting in December 2005. The STFs will also be encouraged to rotate the position of chairperson to improve and broaden the involvement of Medical Colleges.

4. **Letter to treat as official duty**: NTF will facilitate in issuance of a letter from MOHFW to State Governments/ medical colleges, to treat RNTCP-related activities/tours made by medical college faculty members as official duty.

5. **Travel by Air**: NTF will facilitate in the issuance of a directive from MOHFW permitting STF/ZTF/NTF to travel by air for RNTCP related activities (for distance of >500km) after the approval of the PIP by the cabinet.

6. **Financial Guidelines**: CTD will share financial guidelines to facilitate medical colleges/task forces to budget their activities

7. **Operational Research Guidelines**: CTD will share Operational Research guidelines to facilitate and standardize the submission and approval of OR proposals.

8. **ZTF Workshops**: The NTF was of the view that the ZTF meeting can take place at least once a year, and this would be along with the ZTF workshops. In due course, ZTF meetings could be twice a year as recommended earlier by NTF. All these ZTF workshops are to be held by September of each year, well in time before the next NTF meeting, which will be held in November every year.

**CONCLUDING SESSION: NEXT STEPS**

During the concluding session, the following action points were identified for follow-up:

1. NTF will finalize the sensitization curriculum and standardized presentations in the form of a CD and shall circulate the same to all medical colleges for their use.

2. All Medical Colleges to participate in the MIS/ reporting system for medical colleges as finalized by the NTF. All colleges will start collecting data required for these formats by January 2006 and report the first quarter report in April 2006, and quarterly thereafter. Data collection formats will be circulated to all Medical Colleges by December 2005.

3. NTF decided to introduce ‘Referral for treatment’ mechanism in all medical colleges which shall be in place in all colleges by Jan 2006.
4. The generic OR protocols will be finalized and study will be initiated by June 2006.
5. NTF decided to strengthen visits to review RNTCP implementation at all levels: By STF to medical colleges, by ZTF to STF and by NTF to the ZTF. These visits are to be planned in consultation with the host state/medical colleges who will then facilitate the visits. The visiting team should try to brief higher authorities (DME/Health Secretary) during such visits.

Annex 1. List of participants

Group 1. Sensitization Curriculum
1. Dr Sanjeev Sinha
2. Dr P K Sinha
3. Dr B. Mahadev
4. Dr Teja Ram
5. Dr K R John
6. Dr AM Mesquita
7. Dr Setu Madhavan
8. Dr Leela Itty Amma
9. Dr D Goswami
10. Dr B Das
11. Dr S. Kashyap
12. Dr SV Ghorpode
13. Dr Tarak Shah
14. Dr Reuben Swamickam

Group 2. MIS and reporting formats
1. Dr Alladi Mohan
2. Dr V S Salhotra

Group 3. Referral for Treatment
1. Dr Varinder Singh
2. Dr RS Sisodia
3. Dr S Sahu
4. Dr Neena Sinha
5. Dr R Ramnath
6. Dr LP Bhojwani  
7. Dr Jai Kishan  
8. Dr Jaydib Dey  
9. Dr VK Tiwari  
10. Dr Geeta Joseph  
11. Dr Dilip Singh  
12. Dr N K Jain  
13. Dr S Sehgal  
14. Dr Neeraj Raizada  

Group 4. Operations research

1. Dr SK Sharma  
2. Dr SK Jindal  
3. Dr Gautam Ahluwalia  
4. Dr Vinay Gulati  
5. Dr Rani Balasubramaniam  
6. Dr Ranjini Ramachandran  
7. Dr Preetish V  
8. Dr Tahir  
9. Dr A L Da Costa  
10. Dr Ashok Shankar Singh  
11. Dr Gautam Roy  
12. Dr M K Maitra  
13. Dr S C Tiwari  
14. Dr KB Gupta  
15. Dr Sai Kumar  
16. Dr Jamie Tonsing

Group 5. Operationalization

1. Dr Selvakumar  
2. Dr P P Mandal  
3. Dr Deepak Gupta  
4. Dr KJ reddy  
5. Dr PM Deb  
6. Dr AB Patil  
7. Dr Salil Bhargava  
8. Dr NN Sonowal  
9. Dr AK Janmeja  
10. Dr Kushwaha  
11. Dr Yamuna Mundade  
12. Dr Raj Singh  
13. Dr KP Singh