Report of the Seventh National Task Force workshop for enhancing the involvement of medical colleges under RNTCP held on 23rd and 24th Oct, 2008 at AIIMS

The seventh National Task Force Workshop, for enhancing the involvement of medical colleges under the Revised National TB Control Programme was jointly organized by the AIIMS and CTD with financial and technical support of WHO-India. This meeting was held at the conference hall of the All India Institute of Medical Science on 23rd and 24th Oct, 2008. The invitees for this NTF workshop were as follows

1. The ZTF Chairpersons of the 5 Zones,
2. The Zonal OR Committee Chairpersons of the 5 zones
3. The ZTF Member Secretaries and Zonal OR Committee member Secretaries (STOs of Andhra Pradesh, Punjab, Bihar, Gujarat, Assam and Chandigarh),
4. STF chairpersons of all the states,
5. One representative from each of the 7 nodal centers (AIIMS-Delhi, PGI-Chandigarh, SMS-Jaipur, LTM-Mumbai, CMC-Vellore, RG Kar Medical College-Kolkotta and Guwahati Medical college)
6. State HQ consultants who are coordinating with the ZTF Chairpersons and Member Secretaries (HQ consultants of Andhra Pradesh, Assam, Bihar, Punjab and Gujarat).

The detailed list of participants is given as annexure.

The objectives of the meeting were as follows:

1. Review the progress in involvement of medical colleges vis a vis recommendations of the 2007 workshop.
2. Share experiences, identify bottlenecks and provide suggestions for future
3. To share RNTCP response plan to MDR, XDR TB and TB-HIV
4. To develop an action plan with monitoring indicators for the next 1 year

The detailed agenda for the workshop is given as annexure 1.

The workshop began with an inauguration session. Dr Shiv Lal, Special Director General of Health Services, Ministry of Health and Family Welfare, Government of India and Dr S J Habayeb, WHO-Representative to India, WHO-India were the Chief Guests for the inaugural session.

Dr. SK Sharma (Prof & Head, Department of Medicine, Chief, Division of Pulmonary Medicine and Critical care and the Chairman, RNTCP National Task Force), welcomed all the dignitaries and participants from various states, central Institutes to this workshop. He informed that with the commitment showed by the state and the zonal task forces, more than 263 medical colleges have been involved for providing RNTCP services in the country. In addition to this, the faculty from the medical colleges is also participating and advocating RNTCP as a standard of anti-care amongst students and peers. The medical colleges have also undertaken important operational research to support the programme in making evidence based decision making. He concluded by mentioning that the NTF is committed ensure participation of the medical colleges for addressing all the challenges for TB control in India.

Dr L S Chauhan (DDG-TB) made a brief presentation on the proposed changes in the RNTCP definitions of TB suspect & smear positive TB and the RNTCP recommendations on the number of sputum smear examinations required to

diagnose smear positive TB and the evidence behind the proposed revisions for the endorsement by the NTF.

Dr S J Habayeb, WHO Representative to India, was the next to address the gathering. He mentioned that India, is leading the developing nations in developing innovative mechanisms for Public and private collaboration under the national health programme. Since he had also participated in the previous NTF meetings, he expressed that the enthusiasm for participation for TB control activities has been increasing year after year. He expressed that with such participation, the programme must not have any problems in addressing the challenges of sustainability, TB-HIV co-infection, drug resistant TB and operational research. He wished the workshop grand success.

Dr Shiv Lal, Special Director General of Health Services (Public Health), Ministry of Health and Family Welfare, Government of India, in his inaugural address mentioned that, without doubt, RNTCP is one of the best performing public health programme of the Govt. Of India. The achievements under the programme have been possible due to the active participation of all the stakeholders. One of the best examples for this is the participation of the medical colleges under the task force mechanisms. Similar attempts have been made by other national health programmes with varying successes much below what has been achieved under RNTCP. He wished the workshop success in meeting its objectives.

The inaugural session concluded with a vote of thanks by Dr Pranay Sinha (AIIMS, New Delhi).

This was followed by the presentation of the annual reports by the ZTF chairpersons of all the zones. Dr SP Tripathy (Former DG-ICMR), Dr SK Sharma (Chairman, NTF) and Dr LS Chauhan (DDG-TB) chaired the session. A brief overview of the status is as shown below.

Out of 276 recognised medical colleges as on 30th Sept, 2008, by MCI, 262 medical colleges have been involved (formation of core committee, establishment of DMC and DOT center

Name of the Zone	**Total No. of Medical colleges (MCs)**	**No. of MCs with core committees / DMC + DOT Centers**
North	46	44
South	124	115
East	29	28
West	69	67
North East	8	8
Total	276	262

In these medical colleges for the period 1st July, 2007-30th June, 2008, 77,966 sputum smear positive TB cases, 28,287 sputum smear negative TB cases and 46,540 extra-pulmonary TB cases have been diagnosed and either put on RNTCP treatment within the medical colleges or referred for treatment outside the medical college to the DOT center that is convenient to the patient.

Type of patients	Total diagnosed by the medical colleges	Of the total no. diagnosed, no. of patients put of DOT in Medical colleges	No. of smear positive patients referred for treatment
Smear Positive	77966	18,920	59,046
Smear negative	28827	5,608*	23,219*
Extra-Pulmonary	46540	6,803*	39,737*

Some of the constraints that are being faced by the medical colleges are as follows

- Delay in formation of Core committees, establishment of DMCs in some of the medical colleges
- Technical doubts about efficacy of DOTS regimens particularly in extra-pulmonary cases leading to inadequate participation of all departments of the medical colleges under the programme
- RNTCP and International Standards of TB Care are inadequately taught to the undergraduates/interns/post graduates
- Vacancies in Medical Colleges not being filled up on time, salaries to RNTCP contractual staff not on par with payments in the sector
- Delay/non-release of funds to STFs leading to non-performance of planned activities
- Inadequate support from medical college laboratories for diagnosis of MDR-TB cases leading to Non-availability of accredited diagnosis and treatment services for MDR TB patients in majority of the areas of the country.
- Inadequate/poor co-ordination between medical colleges and the programme managers at some states/districts level leading to treatment of TB patients under non-programmatic conditions.
- Irrational use of second line anti-TB drugs for the management of TB patients
- Poor/inadequate airborne infection control practices in most of the medical colleges

It was informed, that the STF and ZTF undertake adequate measures with the assistance of respective STOs and DTOs in getting the un-involved medical colleges under the programme. This matter will be taken up by CTD with the MCI and explore the possibilities of MCI ensuring that the medical colleges participate in all national health programme. The programme has undertaken all measures to address the issue of the efficacy of RNTCP regimens in extra-pulmonary cases. It has also encouraged suitable operational research, to generate further evidence on the efficacy of the regimen. The results of these operational research will further aid to advocating the prescription of RNTCP regimens for extra-pulmonary TB patients. It is also proposed to request MCI to make RNTCP and International Standards of TB Care as a part of the curriculum for the undergraduates/interns/post graduate medical students. With respect to the vacancies of the RNTCP contractual staff at medical colleges, it was informed that the proposal for considering a pay hike for these staff has been put up and it is awaiting approval from the higher administrative authorities of the Ministry of Health, Govt of India.

Regarding delay/non-release of funds and problems with co-ordination between the STF by the STOs of the respective state, it was informed that the STFs must plan all activities and

submit an action plan well in advance. Even after this, if there are any delays on the part of the STOs, then the same may be brought to the notice of the CTD.

Regarding irrational use of first and second line drugs for the treatment of TB, it was informed, that RNTCP is planning to expand the DOTS-Plus services across the country by 2010. The Chennai consensus statement on MDR/XDR-TB may be used in the interim for advocating the rational use of first and second line anti-TB drugs.

RNTCP is in the process of formulating guidelines on airborne infection control practices and these will in-turn be helpful for all the providers in addressing the issues pertaining to this topic in the medical college setting.

The luncheon meeting of the members of the National Task Force was held during the lunch time of Day-1. The minutes of the meeting has been given in Part-1 of Annexure-3

The presentation on the annual reports was followed by group work on the following topics

Group-1: Airborne Infection Control - Role of medical colleges in addressing this issue in medical college settings
Group-2: Mechanisms for promoting up-take of Pediatric patient wise boxes in medical colleges and operationalisation of pediatric contact screening
Group-3: Role of medical colleges in addressing the challenges of MDR and XDR including the application of Chennai consensus statement
Group-4: Monitoring mechanisms by Zonal OR Committee

The recommendation from the group work was finalized and presented on Day-2. The detailed recommendations have been given in Part-2 of Annexure-3.

CTD also made a presentation on the ambiguities in the RNTCP medical college quarterly reporting formats and it was informed that the proposed changes will be communicated to the field.

This was followed by the concluding session. Dr RS Shukla, [Joint Secretary, Ministry of Health and Family Welfare, GoI] and Dr Prasaanna Raj [Joint Secretary, Medical Council of India] were the chief guests for the session.

During this session, Dr SK Sharma presented the synopsis of the status of medical college involvements and the recommendations of the present National Task Force Workshop. Dr Prasanna Raj, during his concluding remarks, appreciated the progress and requested the NTF & CTD to have an exclusive meeting with the MCI and further discuss the role and modality of MCI support for further enhancing the participation of the medical colleges under the programme. Dr RS Shukla in his concluding remarks, mentioned that with the wide spread involvement of medical colleges under RNTCP, the availability of RNTCP services has widened. He highlighted that still within a well performing programme there will be pockets of inadequate access of services by marginalized populations. And TB in this marginalized population will further add to their disadvantage. He urged the medical colleges to assist the programme in addressing this important challenge in addition to the support that they are rendering in addressing the other major challenges. Dr LS Chauhan(DDG-TB), in while delivering the vote of thanks and expressed his gratitude to the chief guests for making it convenient to come to the concluding session and also thanked all the participants for their support to the programme and for their contribution to the proceedings of the workshop. He expressed his appreciation to Dr SK Sharma and his team from AIIMS for the excellent arrangements that were made for the workshop.

Annexure-3: Recommendations of the Seventh National Task Force Workshop held at AIIMS, New Delhi on 23-24, Oct, 2008

Part-I: Minutes of the National Task Force meeting 2008

Date: 23rd Oct, 2008 (1:30-2:30 PM)

Venue: Conference hall, AIIMS

Prof S K Sharma welcomed all the participants, to the seventh annual meeting of the National Task Force for the involvement of medical colleges. He appreciated the zonal and state task force members for the commendable progress made in the involvement of medical colleges in the country. The following agenda items were discussed during the meeting

1. **Dissemination of information pertaining to Airborne Infection Control in hospital settings:** It was informed to the members that the National Airborne infection guidelines are being drafted by a committe headed by Prof. SK Jindal. Once these guidelines are available, the members must undertake activities to disseminate the information as recommended by the group on 'Airborne infection control' during the current NTF workshop.
2. **Increasing representation from other departments like Microbiology, Pediatrics, Preventive and Social Medicine in Core Committee, state task force and National task force:** Poor representation of faculties from these departments was identified as one of the major reasons for sub-optimal participation of these departments in the programme leading to a lot of TB cases diagnosed in the medical colleges to be treated outside the programme. It was agreed to that the faculty from these departments should be made an integral part of the core-committees within every medical college, and also in the state, zonal and national task force.
3. **Dissemination of Chennai Consensus Statement:** It was observed that even after an year of the issuance of the Chennai consensus statement on MDR and XDR TB, most of the medical college faculties were unaware of the statement. In order to disseminate this information it was recommended, that the members must take active steps such as
    a. The presentation on the Chennai consensus statement may be made an integral part of the all STF and ZTF workshops
    b. The statement may be sent out for publication in National peer reviewed medical journals such as National Medical Journal of India and the Indian Journal of Tuberculosis and Lung Diseases.
4. **Commitment from Medical Colleges for Culture and DST services for RNTCP DOTS Plus:** The national task force expressed its commitment to promote accreditation of existing medical college M TB culture and DST laboratories. These accredited laboratories will fill the gap that exists for the diagnosis of MDR-TB cases, which in turn will promote the scale up of DOTS-Plus services under RNTCP.
5. **Promoting RNTCP in respective professional associations:** Though RNTCP is successfully implemented across the country, the professional consensus for the treatment of extra-pulmonary TB cases is still sub-optimal. Since all members of NTF are members of various professional associations, it was requested that they promote RNTCP in these professional associations as well. CTD will provide necessary support for all such promotions in the professional associations.
6. In order to streamline the reporting from Medical Colleges, it was informed to all the members that E mail ids have been created under the existing RNTCP mailing system to all the STF/ZTF and NTF members.

7. **Request for MCI Support:** The following areas were identified for requesting the Medical Council of India to support RNTCP
    a. Undergraduate and post-graduate cirricula/syllabus of all specialties and sub-specialities to include principles of DOTS, ISTC and RNTCP for the management of TB cases
    b. MCI to ensure that questions on RNTCP and ISTC are included in the undergraduate and postgraduate examination question papers of all specialties.
    c. MCI to ensure that designated microscopy centers and DOT centers are available in all medical colleges across the country.
    d. MCI to promote rational use of quinolones in the treatment of tuberculosis and promote Chennai consensus statement for the management of confirmed MDR-TB patients in the medical colleges
    e. MCI to be requested to ensure that the post graduates cirricula of the Microbiology departments includes hands on experience on the M TB culture and DST.
    f. MCI to be requested to promote the air borne infection control practices in the medical colleges as per the guidelines being developed by RNTCP.
8. **Preparations for JMM of RNTCP in Mid 2009:** It was informed to the NTF that a Joint Monitoring Mission of the RNTCP is planned in Mid 2009. In this regard in order to show cases the achievements of medical colleges under RNTCP it was requested that a writing group be formed for drafting a manuscript/Report on "Status of involvement of medical colleges under RNTCP". In addition to this all the ZTFs and STFs will make a detailed analysis and be prepared to provide adequate information on the of the status of involvement in their respective zones and states. The ZTF Chairpersons are to co-ordinate this activity in their respective zones.
9. <u>Statement of the NTF on the proposed changes in the RNTCP definitions of TB suspect & smear positive TB and the RNTCP recommendations on the number of sputum smear examinations required to diagnose smear positive TB</u>
    - The NTF was informed about the new WHO STAG recommendations and the evidence supporting it, including additional evidence from TRC Chennai.
    - The NTF is of the opinion that the changes proposed by RNTCP which changes the diagnostic criteria of smear positive TB as listed below will result in early diagnosis of TB, reduce the per patient work load for diagnosis and could lead to increased case detection of smear positive TB..
    - NTF endorses the proposed changes in the RNTCP diagnostic criteria which are as follows:
        – TB suspect is any person with cough for two weeks, or more
        – Number of sputum specimen required for diagnosis is 2, with one of them being a morning sputum
        – One specimen positive out of the two is enough to declare a patient as smear positive TB.
- However, in this context, to address a few concerns, NTF recommends the following:
    - RNTCP to ensure that the full range of EQA activities is implemented across all states and districts.
    - Implementation of all three proposed changes simultaneously and not in parts.
    - Operational research by a multi-centric study to determine the extent of false positive diagnosis of sputum smear positive pulmonary TB cases in patients with a single result of scanty positive.

Participants: Dr S K Sharma, Dr LS Chauhan, Dr D Behera, Dr P Kumar, Dr Selva Kumar, Dr S Sahu, Dr Fraser Wares, Dr Puneet Dewan, DR VP Kalra, Dr Sarabjit Singh Chadha, Dr S

Srinath, Dr Jaikishan, Dr K Venu, Dr AS Singh, Dr Rajesh Solanki, Dr Thombi Singh, Dr KR John, Dr NN Aggarwal & Dr NK Jain.

Part-II: Recommendations of the group work

IIa. Recommendations of Group-1 on "Airborne infection control – Role of medical colleges in addressing the issues in medical college setting"

The group identified the following groups of individuals to be sensitized to promote airborne infection control in the medical colleges

- Director of Medical Education (DME)
- Administrators (Hospital Administrators, bureaucrats)
- Heads of engineering dept – architects and civil engineers
- Doctors
- Nursing staff
- Students - PG, UG and Nursing
- Lab/OT staff
- Patients/their attendants

The following opportunities were identified for effective dissemination of information pertaining to airborne infection control within medical colleges

- Infection control committee meeting
- Hospital administrators/doctors -Workshops
- Students-classes, symposia
- Nursing/paramedic-classes
- Patients and attendants-education at time of registration, admission.

The major barriers that must be overcome in effective dissemination of information related to airborne infection control are

- Lack of knowledge / awareness among the persons responsible for implementing AIC measures
- The significance of AIC has not gained adequate attention due to which there is
    - The inadequate administrative commitment for AIC
    - No functional infection control committee in most of the medical colleges especially for airborne infection
- Non availability of guidelines for AIC
- Absence of monitoring mechanisms for AIC in hospitals
- Perceived excess cost for AIC interventions

In order to disseminate the information on AIC the following activities have been proposed

- Sensitization of DME
- Separate budget for AIC – IEC/sensitization, infrastructure
- Identification of Master trainers and training them on infection control
- Formation of effective AIC sub-committee under Infection control committee
- Sensitization during core committee meetings
- Formulation of AIC guidelines for implementation
- AIC as an agenda point during Core committee / college council meetings with regular review
- Training of architects and civil engineers
- Separate sensitization programmes on AIC for
    - Administrators

  - Faculty
- AIC to be included in curricula of UG, PG and nursing courses
- Development of target specific IEC material on AIC
- Enforce regulation on spitting in public places especially in medical colleges
- AIC to be integral part in community medicine teaching

Interventions for implementing air borne infection control in medical college setting:

- Administrative measures

OPD

  - Hospital building new construction / renovation to be undertaken in consultation with
    - AIC Committee members
    - Public health engineering specialist
  - Fast tracking of TB suspects – more applicable in general hospital central registration
    - Priority registration and examination
      - Separate counter for cough symptomatics
      - Color coding of OPD cards for TB/non TB patients in Chest OPD
      - Cough hygiene material on OPD
      - Disposable mask to be offered to all cough symptomatics
      - Posters / banners & public address system
  - Sputum collection/induction to be done preferably in open space/well ventilated areas as per RNTCP guidelines.
  - HIV +ve patients should not share the waiting area with chest symptomatics
  - Sputum disposal to be made strictly as per Biomedical Waste management guidelines
  - ICTC/ ART centers to be preferably located at some distance from DOT centers
  - HIV + patients to be admitted separately from known sputum +TB patients
  - Volunteers from HIV +ve network for fast tracking chest symptomatics at ART center.
  - All ART centers to implement administrative control measures
  - Open doors in wards

Indoor

  - Use of disposable mask for admitted patients (indoor)
  - Individual patient mugs with 5% phenol for patient's sputum disinfection (indoor) and subsequent disposal.

- **Engineering measures-**
  - Maximization of natural cross-ventilation – OPD, wards, waiting area
  - Separate waiting area should be made available (corridors should not be used for waiting area)
  - Adequately sized numbers of windows
  - Installation of climate control (heating / cooling) not at the expense of ventilation
  - Chest OPD/wards to be spacious with adequate cross-ventilation.
  - Bed spacing of at least 6 ft between two
  - Building design to reduce spread of airborne infection
  - Use of fans / correctly placed exhausts in the OPD/waiting space/indoor wards.
  - Additional interventions like UV lights and HEPA filters should be considered only when natural ventilation is not possible.

  - Biomedical engineering measures to be utilized
  - Heaters may be considered for MDR-TB wards in cold conditions
- **Personal Protective measures-**
  - Cough etiquette/hygiene
  - Provision of masks for patients wherever possible
  - Education & training of staff.
  - Visitors can be restricted
  - Health personnel involved in management of MDR patients and in bronchoscopy room to be provided with N 95 respirators
  - Masks for patients in CT scan/X ray room
  - While performing bronchoscopy ventilation needs to be ensured

Checklist for assessing airborne infection control practices in the medical college to include

- AIC Committee formed or not
- Whether regularly reviewing AIC measures in Medical college or not
- Whether AIC related curriculum included or not
- Assessment of adequate ventilation by estimating the air changes per hour in all relevant places.

Priority areas for operational research on airborne infection control

- Study of risk of transmission of TB among health personnel.
- Study the efficacy of bio-safety cabinets in reducing the risk of transmission of TB during sputum smear examinations
- Study on issues on cross infection in TB wards
- Utility of mask for all suspects while fast tracking
- Output of screening / fast tracking of TB suspects

Action points for central TB Division on airborne infection control

- Development of National guidelines for AIC
- Separate norms & budgetary allocation for undertaking dissemination of issues pertaining to AIC activities.
- Training at state level on AIC
- Inclusion of AIC material in all RNTCP modules

IIb. Group 2 recommendations on "Mechanism for promoting up-take of Pediatric PWB in medical colleges and operationalisation of contact screening among pediatric age group"

The possible reasons that were identified for poor up-take of pediatric patient wise boxes (PPWBs) in medical college is as follows:

- Lack of awareness amongst Pediatricians
  - Few know about the RNTCP and the availability of PWBs
  - Lack of the pool of pediatricians' to promote RNTCP
  - No inroads to include the private sector Pediatricians
- Lack of enough thrust among the program manager to implement the Pediatric PWB
  - Poor efforts to create networking with the pediatricians
  - Inadequate confidence building after sensitisation
  - Apprehensions about regular and sustained availability of PPWBS
- Apprehensions even among "informed" Pediatric academia
  - Lack of confidence in the govt programs
  - Lack of faith on the Government supplied medicines
  - Lack of knowledge and confidence in intermittent therapy
    - Particularly for severe forms of TB like TBM

- Loosing the patients to an "alien" system
- Who shall take care of the other needs of the child
- DOT may not be child friendly
    - Timing clash with school
    - Too many tablets
    - No DT / Syrups
    - Adequacy of Dosages of the Paed PWB across various wt bands

The possible reasons for **Poor operationalisation of contact screening among pediatric age group**

- Medical/ Paramedical Staff
    - Lack of emphasis by Medical doctors or paramedical staff to find out the presence of pediatric contacts
    - Lack of awareness
    - Lack of monitoring – so no "pressure" to meet this commitment/ will to implement the Pediatric PWB
    - The entire household is not being involved as the definition of household is subjective.
- Social:
    - The family might not be convinced about the examination or child being put on chemopropylaxis.
    - Ease and Capacity to rule out active disease in a small child

Recommendations

Better Involvement of the various players

1. Widening the net

1a. Through Task Force mechanism

- The Task force Mechanism to be strengthened and the pediatricians need to have a greater role in the core committee
- In the next ZTF and NTF increase the participations of pediatricians.
- Special session/ focus on Pediatric cases during the review meetings at the Core committee, ZTF and State levels.
- Monitoring consumption of pediatrics PWB and the notification of the pediatrics cases to be compared at the CTD level and feedback to be given to the task forces.

1b. Through training

- Sensitization and motivation of the pediatricians is the need of the hour.
- Develop a key pool of the Concerned Pediatricians
- Involve them as Zonal task Force and State Task Force Members and to sensitize Pediatricians in a phased manner.
    - Chhatisgarh Experience
- Separate training / sensitization session on Pediatric TB under RNTCP – inviting all the HODs and Key opinion makers.

1c. Other training needs

- An action plan to be drawn up for Training of all the doctors in all states to be done in a phased manner with timelines.
- The paramedical staff to be sensitized for pediatric TB.
- Private Pediatric Providers to be sensitized
    - Innovative approaches for roping in the private pediatricians
    - Booklet for wholesome changes in the standards of Pediatric care. This must be attractively packaged.
    - Training modules for improving the standards of pediatric care- clinician oriented packaging.
    - Need to sort out facts into domains- must know, good to know and may know

1d. IEC: to on emphasize pediatric TB

2. Optimizing the involvement of existing stakeholders

2a. Confidence Building for the program team

- Assurance on drug supplies
- Emphasize the need for them to be proactive and receptive to Pediatricians needs

2b. **Managers to honor the referrals/ prescriptions from Pediatric fraternity**

- Important for confidence building of new partners
- If there is diff of opinion – Use One to one communication and not by mere shunting away of patients

2c. More emphasis on need for Screening of children in contact with Smear positive cases

- Provides an opportunity for early detection
- Missed opportunity can be catastrophic for many (.g. TBM in the contacts)
  - Chemoprophylaxis is an effective tool for preventing future TB – including in adults
  - Improve the focus on Screening and INH prophylaxis
    - In the next revision of the treatment cards the box regarding chemoprophylaxis and no of children to be brought to the front of the card.
    - Maintain a record of paediatric patients on INH chemoprophylaxis at appropriate level (Chandigarh Model)

2d. Make the program "Child friendly"

- Strengthening the DMC at the Medical Colleges for Gastric Aspirates.
- Flexitime DOT for the school child
- Pestle mortar for crushing the tablets
- Provision of flavoured sugar syrups – crushed tablets can be given mixed with it.
- Stock of PC 15 and PC 16 at the Paediatric IPD
- Review of drug formulations in diff weight bands
- Emphasize the need for shared care – ensure linkages are established and the referring pediatrician stays in the loop
- Spend time to counsel the family for screening of childhood contacts
  - Opportunities
    - Patient provider interaction meeting
    - School Health Programs
    - IEC activities

Priority areas for operations research on pediatric TB,

- The thesis from Paediatrics Department to be encouraged
  - Consider more than 1 thesis from a medical college if it includes specialties like Pediatrics.
- Thesis/OR topics for consideration:
  - On chemoprophylaxis- Current Usage or constraints - In the field practice area of the Medical College
  - RNTCP in the special situation like TBM and miliary TB.
  - Adverse drug reaction to ATT – particularly Ethambutol
  - Treatment outcome of intermittent therapy under DOT
  - Flexi – DOT ; mothers as DOT providers for pediatric patients, etc.
  - Analysis of relapses and failures- comparison with mg per Kg body wt drug recd.
  - Drug Sensitivity in isolates from patients who were MDR contacts

IIc. Group 3 recommendations on "Role of Medical Colleges in addressing the Challenges of MDR & XDR including the adoption of Chennai Consensus Statement"

The Opportunities within medical colleges for effective dissemination of information on ISTC and rational use of 1st and 2nd line drugs Consensus Statement are

Infrastructure:

- RNTCP cell
- Bacteriology laboratory

Expertise

- Availability of expertise regarding the diagnosis, treatment, side effects, indoor beds.
- Availability of interdepartmental consultation
- Other specialized investigation facilities

Catchment

- Tertiary care centers
- More referral cases
- Patients have more faith

Advocacy

- Medical colleges as source of Information
- By setting example and Media (Voice/Print/Electronic)
- Spreading knowledge of ISTC & Chennai Consensus statement to doctors, students, paramedics.

Research

- Medical College as research center

Other Resources

- NGO / PP scheme now available for private medical college

Barriers within medical colleges for effective dissemination of information related to ISTC and rational use of 1st and 2nd line drugs & Consensus Statement

Knowledge:

- Lack of adequate knowledge among the staff regarding

- Drug sensitive TB
- MDR & XDR TB

Administrative control:

- Lack of administrative control to stop irrational use of first & second line drugs
- Guidelines on up-gradation / establishment of culture and DST labs in medical colleges not available. Minimum requirement to get accreditation to be shared with all medical colleges

Diagnosis:

- Non-availability of quality & accredited laboratory for C/S
- Non standard methods for diagnosis of MDR

Treatment:

- Unregulated availability offirst & second line ATT
- Irrational prescriptions by faculty

Action plan outlining use of opportunities to disseminate information on ISTC and Chennai consensus statement (CCS)

- Disseminate information on current status and prevention of MDR & XDR, to include ISTC / CCS

Sensitize
  - faculty,
  - students
  - paramedics periodically through meetings, seminars, CMEs, interdepartmental meetings, conferences, publications, etc
- Scientific bodies like IMA, API, FPA etc. to be informed about ISTC / CCS
- Rationale and cautious use of Quinolones and other second line drugs to be emphasized to all doctors (govt./private)
- Emphasis on importance of completion of TB treatment & adherence to standard regimens (DOTS)
- Early accreditation of the Microbiology lab

Curriculum for UGs & Interns teaching of ISTC & RNTCP
- Facilitate the MCI to issue directions
- Lectures (minimum 5-6 lectures) regarding TB & RNTCP
  - Diagnosis
  - Definitions
  - Management
  - Prevention
  - Practical sessions on infection control & drug boxes
- Interns sensitization

Ownership:
- Commitment by the faculties
- Ensure Patients are treated only through single window system
- Effective core committees
  - All HODs to be included in the core committees and sensitized

Role of Medical Colleges in Advocacy for ISTC and CCS outside the medical colleges
- Sensitize all stake holders about rational use of drugs, ISTC and CCS.
- Sensitization of peers through
  - Professional medical associations IMA, IAP, API etc
  - Other Govt Health Agencies (ESI/Railways/Ordnance etc)

Operational Research- Priority Topics
- Documentation of TB management practices across all health sectors and outside RNTCP for both drug sensitive TB and MDR-TB cases
- KAP among doctors on MDR / XDR TB diagnosis and management
- To study the adverse effects of 2nd line drugs amongst the patients being treated as per the Chennai Consensus statement
- Regularity / follow-up issues
- Prospective studies regarding evaluation of recommended DOTS-plus regimen in field conditions
- To study the adverse effects of 2nd line drugs amongst the patients being treated as per the Chennai Consensus statement
- Regularity / follow-up issues
- Prospective studies regarding evaluation of recommended DOTS-plus regimen in field conditions
- On generating information on the existing practices for management of MDR patients outside RNTCP

IId. Group IV recommendations on Zonal OR committee

Mechanism for monitoring the status of OR proposals received.

- Time frames
  - Before submission of the project, administrative and ethical approval has to be obtained from the concerned institute.
  - The review should be completed by Chairman of State OR committee and Zonal OR committee within three months and convey the same to the State OR committee as well as to Principal Investigator.
- Any suggestion made by the members of the Zonal OR committee shall be conveyed to the PI (and STF) by the Chairman for any modification and amendment. The Chairman will take the final decision in consultation with the members after receipt of the amended proposal
- Recommendation for the flow of the approved OR proposals

After approval of OR from zonal OR committee

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STO should ensure the disbursement of fund to PI with in a month

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Monitor progress

Mechanism for monitoring the status of Funded OR proposals

- A standard 'Monitoring Performa' for reporting to be developed by the Chairman Zonal OR that includes progress of the study as per protocol and utilization of funds, etc
- Bi-annual reporting of the progress of the OR study to be done by the PI to the Chairperson STF with copy to Chairman Zonal OR, preferably electronically
- STF Chairperson should also send his comments of the study within one month to Chairman Zonal OR Committee
- The Chairman Zonal OR will discuss all the progress report with the Zonal OR Committee members and communicate any comments/suggestions to the PI through STF

Recommendations to address the constraints with respect to the functioning of the Zonal OR committee

- Support for Zonal OR committee functioning
  - Contingency Funds to be made available at the disposal of Chairman Zonal OR Committee through appropriate mechanisms
- To address the issue of Not enough OR proposals are being received
  - National institutes should take the initiative to build capacity of medical colleges for OR activities
  - Zonal level workshop on research Methodology to be scheduled and funding to be made available by CTD
  - Chairman Zonal OR would be coordinating with CTD in arranging the funds for the Workshop and all other activities.
  - Letter to be written by the GoI to Deans of various Medical Colleges regarding promotion/ encourage OR projects in the State with a copy to Chairman ZTF

  - Funding pattern of 50%-30%-20%, should be made 50-40-10%
- Other issues
  - The proceedings of the biannual Zonal OR committee meeting should include the comments on the follow up action of the OR projects running in the Zone and any gaps to be pointed out
  - If the revised proposal is not received within a month after the PI was informed, it should be pursued by the convener of the Zonal OR
  - Six monthly review meeting of the Zonal OR committee should include formulation of action plans for OR related needs during the next six months
  - Best OR project completed to be decided and awarded by the CTD.
  - Copyright issues: Outcome of the OR should be the joint property of CTD & Principle Investigator and while disseminating the results their contribution should be duly acknowledged

IIe. Participants of the Group Work

Group 1	Group 2	Group 3	Group 4
Airborne Infection Control - Role of medical colleges in addressing this issue in medical college settings	Mechanisms for promoting up-take of **Pediatric patient wise boxes** in medical colleges and operationalization of pediatric contact screening	Role of medical colleges in **addressing the challenges of MDR and XDR** including the application of Chennai consensus statement	**Monitoring mechnaims by Zonal OR Committee**
Dr K Sachdeva-CTD	Dr P Saxena- CTD	Dr SK Chaturvedi-CTD	Dr D Behera, LRS Institute
Dr Puneet Dewan-WHO	Dr S Sahu-WHO	Dr Fraser Wares -WHO	Dr Prahlad Kumar-NTI, Bangalore
Dr Geetanjali Sharma -CTD	Dr V P Kalra-CTD	Dr Rajesh Solanki-Gujarat	Dr Devesh Gupta-CTD
Dr Kiran Rade- Gujarat	Dr Anupama Hazarika-Assam	Dr Santosha K- Andhra Pradesh	Dr Shammim Mannan- Mannan
Dr Roopak Singla- LRS Institute	Dr Varinder Singh-Delhi	Dr R Sarin- LRS Institute	Dr Sheena Susan George- CTD
Dr Anand- NTI, B'lore	Dr Selvakumar-TRC, Chennai	Dr Sanjeev Nair-Kerala	Dr Vishala- LRS Institute
Dr Jagdish Rawat	Dr Amar Verma-Jharkhand	Dr K Venu- Andhra Pradesh	Dr NN Agarwal-Jharkhand
Dr Ashok Shanker Singh- Bihar	Dr P K Shridhar-Chandigarh	Dr Aleyamma Thomas-TRC, Chennai	Dr NK Jain-Rajasthan
Dr Alladi Mohan-Andhra Pradesh	Dr Rajdeep Srivastava-Chandigarh	Dr P K Dave- Gujarat	Dr Shailaja- Andhra Pradesh
Dr Jaikishan- Punjab	Dr Anil Purty-Pondicherry	Dr Basanta	Dr Dheeraj Gupta-Chandigarh
Dr C Raveendran-Kerala	Dr Pawan Kumar Bansal-Punjab	Dr Kadihiravan- New Delhi	Dr A K Bhardwaj-Himachal Pradesh
Dr D T Dash- Orissa	Dr R S Mukherjee-	Dr S Kashyap-Himachal Pradesh	Dr S S Khushwaha-Madhya Pradesh
Dr K B Gupta-Haryana	Dr S L Adile- Chattisgarh	Dr Vinod Kumar-Tamil Nadu	Dr Khalid
Dr Nirmal Verma	Dr Dhiren Das- Assam	Dr C Nagaraja-Karnataka	Dr P C Mahajan-Madhya Pradesh
Dr Sushil Kumar Munjal	Dr Doley- Tripura	Dr P K Chhaya- Gujarat	Dr Imtiaz Ali Bhat-Kashmir
Dr R A S Khushwaha-Uttar Pradesh	Dr S N Rai- CTD	Dr Anil Kumar	Dr N. Tombi Singh-Manipur
Dr Narendra Mohan Sharma	Dr A T Levna-Gujarat	Dr Rajendra Prasad-Uttar Pradesh	Dr G T Subhash-Karnataka
Dr Mesquita- Goa	Dr S L Jethani-Uttarakhand	Dr Sarabjit Siingh Chadha- CTD	Dr Lohadia-Rajasthan
Dr Srinath S- CTD	Dr Deepak Gupta- New Delhi		Dr K R John-Tamil Nadu