

Recommendations

With eight years of implementation and three years of large-scale service delivery, the RNTCP has proved its credibility as the most effective strategy to control TB in India. This group of medical college teachers is greatly impressed by the achievements made by the RNTCP to date. It is heartening to note that the DOTS strategy is today available to nearly half of the country's population. The group also notes with satisfaction that despite the massive and rapid expansion of the revised strategy, there has been no compromise on quality of services and overall results remain technically acceptable and in many areas are excellent.

The continuing success of the programme will depend to a large extent on the involvement of all large providers of care of which medical colleges form a major part. Medical colleges play a critical role in TB control both as opinion leaders/ trendsetters and as referral centres. Medical colleges impart knowledge & skills, shape attitudes of the medical students and also update the knowledge of practitioners. Improved teaching will promote sustainability of the programme. Medical colleges must therefore continue and increase their support in implementation of the RNTCP on a priority basis. With this background, this Workshop appreciates the due importance given to medical colleges in the RNTCP and recommends the following:

Implementation of RNTCP at Medical Colleges:

1. Directors of medical education, Deans, and Principals should be sensitized to the RNTCP. One nodal MO from each medical college should be trained at central level and should be the officer in charge of RNTCP services.
2. In co-ordination with their respective DTCs, each medical college should establish facilities for participation in the programme as a TU, MC, and/or treatment observation centre. For this purpose, medical colleges should identify a space for locating the appropriate service integrated with similar available service network, e.g. if a MC then it should be located with existing laboratory facilities within its hospital premises. This facility should be the responsibility of the Chest Department, with full involvement of all other relevant departments, particularly PSM, Microbiology, etc. Medical colleges must specifically earmark the health functionary to perform the identified function. Training for staff at these centres, logistics and manpower support (LT, TBHV, MO, supervisor) wherever required should be sought from the RNTCP through district TB officials. RNTCP should provide binocular microscope, medicines, reagents, slides, sputum containers, stationery, etc., as needed.

3. The practice of three sputum smear examinations as a primary diagnostic tool for pulmonary TB should be promoted and established. All departments of the medical colleges should be sensitized to the programme, and activities within the hospital coordinated to ensure that each and every adult outpatient is asked about cough, and that all persons with cough for 3 weeks or more undergo 3 sputum examinations at the designated laboratory. This should be widely publicized throughout all OPDs of the medical colleges through posters, etc.
4. Diagnostic algorithm of the RNTCP is based on a sound technical rationale and should be followed as a standardized means of diagnosing TB patients.
5. RNTCP regimens are effective when categorization of patients is made accurately as per guidelines and direct observation of treatment is ensured. The treatment practices followed in medical colleges should thus be standardized to conform to RNTCP principles and guidelines.
6. All rifampicin-containing regimens should be directly observed in the intensive phase.
7. Procedures for referring patients from hospitals to peripheral facilities should be strengthened. A directory providing information of RNTCP facilities within the district should be made available by each DTO to the designated authority of every medical college in the area in order to facilitate appropriate referrals of patients. The hospital should assign one person with the responsibility for ensuring effective referral and for tracking the effectiveness of the referral process in close co-ordination with the District/State TB officials. Peripheral facilities are responsible for providing feedback information to the hospital and ensuring that patients referred by the hospital receive appropriate and complete treatment.
8. For management of TB patients, the following should be considered:
 - Non-seriously ill TB outpatients who do not reside in the catchment area of the hospital should not be initiated on treatment but referred to the DOT centre nearest to the residence of the patient.
 - Except in emergency cases or in seriously ill patients, rifampicin-containing regimens should not be used if direct observation of treatment cannot be ensured.
 - Treatment regimens prescribed to admitted patients should, as far as possible, conform to the accepted protocols.
 - Regardless of the treatment regimen initiated, all patients should receive directly observed treatment during their period of admission in the hospital.
 - Supply of drugs in all DTCs & DOT Centers must be ensured.

9. Recording and reporting should be followed as per policies of RNTCP in close co-ordination with the local RNTCP programme managers. There should be systematic monitoring of and accountability for the outcome of all patients begun on treatment, whether or not they are treated under the RNTCP. Standardized outcome measures, using follow up sputum smears, should be used to evaluate and improve performance of health facilities. Data collected should be analyzed with a view to continuously improve upon services rendered. The facility must be open to monitoring by RNTCP staff.
10. Sensitization workshops to apprise the faculty in the policies and principles of RNTCP should be conducted.
11. To ensure greater awareness, good results and uniformity, technical guidelines and other RNTCP related literature prepared by the CTD should be widely displayed in college libraries, Chest medicine including PSM departments.
12. Greater use of information technology including e-mails for transmission of data, communication etc. Medical colleges should have a computer and internet access, as should all DTCs, in order to facilitate information flow.

Incorporating RNTCP into Medical College curriculum:

1. The scientific basis, background, and current status of the programme should be introduced in the curriculum of medical students at all stages: undergraduate, internship and post-graduate training through the MCI. This should be in pharmacology, microbiology, internal medicine, chest, pediatrics, PSM departments as well as others. At the end of the course, each graduating student should be able to identify, diagnose, and treat a patient as per RNTCP principles and guidelines.
2. Chapters as well as articles on TB and its control should occupy an important status in the curriculum. Questions on TB with specific reference to RNTCP may be frequently asked during examinations to focus attention on the subject. TB control and RNTCP related topics should be considered as priority research areas for preparation of dissertations.
3. Areas which medical college students should be fully informed include, for example, magnitude of the problem, case definitions, diagnostic algorithm, rationale and scientific evidence for intermittent treatment, treatment regimens and categorization, recording and reporting, field visits, supervision, and quarterly reports. Additional desirable areas include HIV-associated TB, childhood TB, complications of TB, social aspects of TB, and MDR-TB – particularly the prevention thereof.

4. Library should be upgraded with RNTCP and other modern teaching materials, with support of the CTD.
5. The technical and operational guidelines of RNTCP related to diagnosis, case finding and treatment of TB patients should be appropriately incorporated in the teaching curricula.
6. Besides its inclusion in theoretical teaching, practical training in the DOTS strategy should be introduced by exposing students through field visits and clinical posting at RNTCP centres. Rural training centres should be upgraded to handle TB patients under the RNTCP. This should include community based problem solving to support the continuous improvement of the RNTCP.
7. Medical colleges should organise workshops and CME programmes for control of TB on a regular basis.
8. All medical colleges should follow the MCI recommendation for posting of UGs and interns to TB departments.
9. Updates on the current status of RNTCP should be sent by programme division regularly to all medical colleges for use in teaching and further dissemination to the community.

Other roles of Medical Colleges in programme implementation

1. Medical colleges in co-ordination with local programme officials should undertake leadership and advocacy role and support in implementation of the programme in the Districts/States. They should be a role model of proper management of patients under the RNTCP. Medical colleges should work as a liaison between the community and the programme.
2. Representatives from medical colleges should be included as members in the District/State TB societies. Medical colleges should be involved in policy and planning of the RNTCP at district, state, and national levels.
3. The potential of medical colleges in training should be fully utilised. This includes training private practitioners and others about the programme, and conducting training in different aspects of RNTCP, particularly for LTs and laboratory supervisors, and training in data analysis and programme management for programme officers.

4. The colleges should participate in identifying problems and helping in improving implementation of the programme. Possible areas for involvement are:
 - Development of model areas for RNTCP implementation
 - Patient satisfaction
 - Drug resistance surveillance as per standard protocols
 - Training needs assessment
 - Reasons and prevention of default
 - HIV-associated TB
 - Newer methods of diagnosis and treatment
 - Alternative regimens for patients who fail Category II treatment or who remain smear positive after 3-4 months of this regimen

It must be ensured that the results of research are widely disseminated and are used to contribute to policy formulation wherever relevant.

5. Model curricula, case studies, teaching aids, and other materials that promote the effective teaching on TB should be developed and sent to CTD, DGHS for harmonising and updating the RNTCP related literature for wider dissemination in the country.
6. Participation in quality control of sputum microscopy.
7. Management of complicated cases with drug reactions, sequelae of pulmonary TB, diagnostic dilemmas, complex extra-pulmonary cases, and chronic patients, medical rehabilitation.
8. Medical colleges should provide services for culture and drug susceptibility testing for patients for whom it is indicated, with quality control to be co-ordinated by TRC.
9. Quality assessment of the programme at all levels, including participation in quarterly review meeting of the programme.
10. Demonstration and publication of data on RNTCP for advocacy and programme improvement.
11. Collaboration of the TB Control Programme with HIV/AIDS control programme at medical colleges and its hospitals to address the needs of HIV-infected TB patients.
12. Support for IEC activities and mass communication, including World TB Day.

Establishment of Nodal Centres

1. Selected medical colleges should function as nodal centres in the four zones of the country. These nodal centres will form a base for the core group to operate in their identified region/states.
2. The core group will facilitate adoption of RNTCP in practice and teaching by increasing number of colleges through advocacy for the programme and conducting sensitization workshops, training etc. They may undertake visits to these medical colleges for these purposes. They may also be involved in appraisal of districts to assess the preparedness for service delivery as well as in monitoring and supervisory activities of the programme.
3. This group should monitor specific targets in terms of plans and recommendations and should systematically monitor:
 - Number of medical colleges in RNTCP areas serving as designated MCs, TUs, and treatment observation centres, and the number of medical colleges within RNTCP areas which are not serving in any of these functions;
 - The impact of advocacy, sensitization and other activities undertaken by the group in facilitating adoption of RNTCP by colleges not yet involved in the programme; and its impact in improving services amongst those already involved in the programme;
 - Highlighting the effectiveness of collaboration of successful centres and its lessons disseminated;
 - Teaching of RNTCP incorporated into medical college curriculum at various levels.
4. The nodal centres will undertake activities in co-ordination with the CTD, GOI.
5. The nodal centres should be provided with necessary support for undertaking these activities by the RNTCP.