

Short Communication

Awareness of Medical Interns Regarding Recent Guidelines of Revised National Tuberculosis Control Programme of India

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ABSTRACT

Background: The medical interns may sometimes a first contact health care provider of patients in teaching hospital as well as secondary and tertiary care hospital and needs to be sensitized towards RNTCP recent policies and strategies in order to reduce TB burden. The present study was undertaken with an objective of assessing knowledge level of medical interns, about various aspects of recent guidelines of RNTCP pertaining to diagnosis and management of TB, with emphasis on MDR and XDR-TB.

Methods: A cross sectional study was conducted at one of the randomly selected private medical colleges of Western Maharashtra. A pretested questionnaire was distributed to 102 medical interns and responses were collected. The data was entered in Microsoft office excel sheet and analyzed.

Results: Of 102 participants, 61(59.80%) were males and 41(40.20%) interns were females. All participants were in the age bracket of 22-24 years with mean age of 22.85 years. In present study, poor knowledge was observed amongst medical interns regarding recent guidelines of RNTCP i.e. Mean score (S.D.) out of 15 = 6.46 (1.55).

Conclusions: The study reported inadequacies in the knowledge of recent guidelines of RNTCP amongst medical interns.

Keywords: awareness, medical interns, RNTCP, recent guidelines, tuberculosis

INTRODUCTION

Despite significant progress, TB still continues to be one of the major public health problems in the country, and intensified efforts are required to reduce TB transmission and accelerate reductions in TB incidence, particularly in urban areas and

difficult terrains. ^[1] India is still the highest TB burden country in the world and accounts for nearly one fifth (20%) of global burden of tuberculosis. ^[2]

The National Tuberculosis Control Programme (NTCP) of India was reviewed by an expert committee appointed by World

Health Organization (WHO) in 1992 and finally Revised National Tuberculosis Control Programme (RNTCP) was launched in March 1997 with phased coverage in various states throughout India. [3] RNTCP has laid down some essential recent guidelines about certain aspects of TB like number of DOTS categories, number of sputum samples for diagnosis of pulmonary TB, MDR and XDR TB etc.

Inappropriate and incomplete prescription and treatment have been identified as major risk factors for the development of the spread of TB and drug resistance. [4] Training of medical students in RNTCP will ensure better future healthcare in the correct diagnosis and treatment of TB. [4]

The medical interns are many times a first contact health care provider of patients in teaching hospital as well as secondary and tertiary care hospital and needs to be sensitized towards RNTCP recent policies and strategies in order to reduce TB burden.

In view of the above background, the present study was undertaken with an objective of assessing knowledge level of medical interns, about various aspects of recent guidelines of RNTCP pertaining to diagnosis and management of TB, with emphasis on MDR and XDR-TB.

MATERIALS AND METHODS

Participants

The present study was a cross-sectional study, carried out in one of randomly selected private medical colleges of Western Maharashtra. All 102 Medical interns who attended 'RNTCP Sensitization Programme' at same medical college were included as participants for the study.

Methods and procedure

The pretested self administered structured questionnaire was distributed to all participants. The questions were based on

recent guidelines of RNTCP about diagnosis of pulmonary TB suspects, Treatment modalities, drug resistance etc. The questionnaire comprised 15 questions, of which 11 questions were multiple choice questions (MCQs) and remaining were true or false type. Total 15 minutes were allowed to complete questionnaire under strict supervision.

Prior to administering the questionnaire, informed consent was taken from the participants after explaining the purpose of the study. The anonymity of the participants was maintained throughout the study.

Data analysis

Entire data was entered into an Office Excel Sheet and data was analysed. The scoring system for each complete question was assigned. Each completed question was assigned one mark for correct response and zero mark for incorrect response. The mean score equal or below seven was classified as having poor knowledge while score more than seven out of fifteen was considered to have good knowledge.

RESULTS

In present study, of 102 participants, 61(59.80%) were males and 41(40.20%) interns were females. All participants were in the age bracket of 22-24 years with mean age of 22.85 years. In present study, poor knowledge was observed amongst medical interns regarding recent guidelines of RNTCP i.e. Mean score (S.D.) out of 15 = 6.46 (1.55).

However good knowledge was found amongst participants regarding certain aspects of MDR-TB like definition of MDR-TB, prevalence of MDR-TB in retreatment cases and name of category for treatment of MDR-TB. (Table 1)

Table 1: Distribution of participants with correct response. (n = 102)

Question No.	Question	Correct Response	No of participants with correct response
1.	Category III is removed from RNTCP	True	50(49.01%)
2.	Definition of MDR-TB	Resistance of TB bacilli to Isoniazide and Rifampicin with or without resistance to other anti-TB drugs	85(83.33%)
3.	Number of sputum samples required for diagnosis of smear positive TB	Two	15(14.70%)
4.	One positive sputum sample is enough to declare a patient as a smear positive case	True	33(32.35%)
5.	Category IV is considered as treatment of	MDR-TB	87(85.29%)
6.	Definition of XDR-TB	MDR-TB + resistance to fluoroquinolones and any one of second line injectable drugs	27(26.47%)
7.	Category V is considered as treatment for	XDR-TB	57(55.88%)
8.	Prevalence of MDR-TB in India in retreatment cases is estimated around	11-20%	70(68.62%)
9.	TB is a notifiable disease in India	True	25(24.50%)
10.	Recommended regimen for MDR-TB	Daily regimen	34(33.33%)
11.	CPT stands for	Cotrimaxazole Preventive Therapy	40(39.21%)
12.	An individual having cough of 2 weeks or more rather than 3 weeks or more should be considered as a Pulmonary TB suspect	True	37(36.27%)
13.	In MDR-TB treatment regimen, continuation phase is for	18 months	49(48.03%)
14.	The drug which is not included in Non-DOTS(ND) treatment regimen	Rifampicin	20(19.60%)
15.	Not true about MDR-TB	Treatment is available everywhere	25(24.51%)

DISCUSSION

The questions were grouped under three broad categories: Diagnosis of tuberculosis, Treatment modalities, MDR-TB and XDR-TB.

Diagnosis of tuberculosis

As per recent guidelines of RNTCP, The number of specimens required for diagnosis of smear positive pulmonary TB is two, with one of them being a morning sputum specimen. [5] In present study, very few i.e. 15(14.70%) participants were aware of this fact, as majority of participants (85.29%) stated 'three' sputum samples required for diagnosis of smear positive TB. However these are the old guidelines of RNTCP.

Sixty nine (67.64%) participants did not know that one positive sputum sample is enough to declare a patient as a smear positive case. Swati M.Baveja and Pratibha J.Dalal reported that only 47% of medical interns had correct knowledge about number

of sputum samples required for diagnosis of smear positive case. [4] In present study, 65 (63.72%) participants did not agree with the fact that an individual having cough of 2 weeks or more rather than 3 weeks or more should be considered as a 'Pulmonary TB suspect'.

Treatment modalities

Fifty two (50.98%) participants were not knowing that category III has been removed from RNTCP. Only 40(39.21%) participants could tell the full form of CPT i.e. Cotrimaxazole Preventive Therapy which is an important aspect of TB-HIV collaboration activities of RNTCP and NACO. Non-DOTS (ND) regimen under RNTCP is a treatment regimen of 12 months duration which includes the administration of Isoniazide, Ethambutol, Streptomycin but not Rifampicin. [6] In present study, 82(80.39%) participants did not know about this fact.

MDR-TB and XDR-TB

Nearly three fourth participants i.e.83.33% correctly defined MDR-TB. Comparatively poor level of knowledge was observed in medical interns of Medical Colleges of Bangalore, [7] where 75.36% of interns accurately defined MDR-TB. Eighty seven (85.29%) participants knew that Category IV is considered as a treatment category for MDR-TB. However, present study revealed poor level of knowledge about certain aspects of MDR-TB like duration and phases of MDR-TB treatment regimen. Only 34(33.33%) participants could correctly state that for MDR-TB, daily regimen is recommended as majority of participants thought that, this regimen is thrice a week regimen. Seventy seven (75.49%) participants believed that MDR-TB treatment is available everywhere as it is given only at designated DOTS-Plus sites.

In present study, overall low levels of knowledge about XDR-TB was observed which corroborates with finding of study conducted by Amita Kutare et al. [7] where only 1.45% of interns had complete knowledge about XDR-TB.

The study reported inadequacies in the knowledge of recent guidelines of RNTCP amongst medical interns, indicating need to organize adequate and substantial training on RNTCP policies and strategies with more emphasis on recent changes in RNTCP.

‘RNTCP Sensitization’ should be the part of regular activity of all medical colleges and hospitals. Traditional methods of teaching like blackboard and chalk method need to be replaced by methodologies like role play, demonstration, question- answer session, setting up various examples, film show, printed handouts, Posters, Group Discussion etc to educate students about RNTCP programme.

The present study had limitation. Sample size in present study was less; hence findings drawn from study could not be

generalized to all medical interns. More studies are needed to assess the knowledge of interns about RNTCP programme especially about recent guidelines of RNTCP.

CONCLUSIONS

The study reflected gaps in the knowledge of medical interns about recent guidelines of RNTCP. ‘RNTCP Sensitization’ should be the part of regular activity of all medical colleges and hospitals. TB/DOTS clinic posting and training should be made compulsory for all the medical students, especially medical interns to strengthen their knowledge and skills for effective management of tuberculosis patients.

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