

## A CROSS-SECTIONAL STUDY ON DURATION OF RNTCP TRAINING AND TREATMENT REGIMEN PRESCRIBED BY MEDICAL PRACTITIONERS TO PATIENTS DIAGNOSED AS TUBERCULOSIS.

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### Abstract

**Background :** Tuberculosis (TB) remains one of the world's deadliest communicable diseases. This study would help us to know whether medical practitioners are categorizing the patient as per norms, whether they had undergone the training in Revised National Tuberculosis Control Programme (RNTCP) by District Tuberculosis Programme, whether they follow RNTCP regimen. Aim of the study To know the duration of RNTCP Training and treatment regimen prescribed by medical practitioners to patients diagnosed as Tuberculosis. To know whether the practitioners have undergone training in RNTCP. To assess whether the practitioners are adhering to drug regimen as per RNTCP programme. **Materials and Methods :** A community based cross sectional study carried out covering all medical practitioners. Total 130 medical practitioners were interviewed by pre-designed and pre-tested questionnaire about various treatment modalities for management of pulmonary tuberculosis practiced by these medical practitioners. **Results :** Out of 130 medical practitioners, 46.9% had undergone RNTCP, 51.5% of medical practitioners had attended TB training course in last five years. 86.9% medical practitioners were categorizing the patients as per the norms before starting the treatment. The daily drug regimen was followed by 92 (80.7%) medical practitioners, 14 (12.3%) medical practitioners followed both daily and intermittent drug regimen but only 8 (7%) medical practitioners followed intermittent drug regimen and 16 medical practitioners followed drug regimen other than RNTCP. **Conclusion:** The present study enabled us to know that medical practitioners need to follow RNTCP guidelines. The medical practitioners should undergo RNTCP training so as to correctly diagnose and treat the patients with rapid lasting cure from tuberculosis.

**Key Words - Tuberculosis, RNTCP, Medical Practitioners**

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## INTRODUCTION

One of the world's deadliest communicable diseases. In 2013, an estimated 9.0 million people. TB is slowly declining each year and it is estimated that 37 million lives were saved between 2000 and 2013 through effective diagnosis and treatment<sup>1</sup>. The World TB Day Report 2015, aims early diagnosis of tuberculosis including universal drug-susceptibility testing, systematic screening of contacts and high-risk groups, providing treatment to all people with tuberculosis including drug-resistant tuberculosis and patient support<sup>2</sup>. According to Tuberculosis community advisory board, 46% patients with tuberculosis (TB) in India, where with high TB prevalence first consult a private practitioner and about 85% in urban area first go to private practitioner in contrast to study of mukund *et al*<sup>3</sup> they seek health-care from the practitioners which include allopathy, ayurvedic, homeopathy, sidha, unani and others<sup>4</sup>. This provides us with information about practitioners who follow RNTCP Regimen and provide DOTS treatment to patients who are diagnosed with tuberculosis. This study would help us to know whether medical practitioners are categorizing the patient as per norms, whether they had undergone the training in RNTCP by District Tuberculosis Programme, whether they follow RNTCP regimen, to know which system is followed by the medical practitioners, to know whether the practitioners have undergone training in RNTCP, to assess whether the practitioners are adhering to drug regimen as per RNTCP programme. The spread of tuberculosis in the community can be prevented by the detection of patients with infectious tuberculosis and providing them with effective treatment to ensure a rapid and lasting cure<sup>5</sup>.

## MATERIAL AND METHODS

A community based cross sectional study was carried out in catchment area of Tertiary Care Centre located in Raigad district in April 2015 to June 2015.

The Ethical Clearance Committee had given clearance to carry out the community based cross sectional study. They comprise of all medical practitioners which were practicing in the locality. The medical practitioners

Tuberculosis (TB) remains included were allopathic/ayurvedic/unani/sidha/homeopathic and others. The practitioners were made aware of the purpose of the study, type of data required for them and its outcome. They were explained the purpose of the study. As per the local General Practitioner's Association, approximately 200 practitioners are practicing within the radius of 5 km around the tertiary health care facility. 70 Practitioners were not willing to participate in the study. The sample size is 130. Total 130 medical practitioners were interviewed by pre-designed and pre-tested questionnaire about various treatment modalities for management of pulmonary tuberculosis practiced by these medical practitioners. The questionnaire and consent form were given to the medical practitioners. A brief description about the study was given to these medical practitioners. The purpose of study was explained to them and it was stressed that this study is only for academic purpose. The tool for the study was personal interviews using pre-designed, preformed questionnaire whether they had undergone the training in RNTCP by District Tuberculosis Programme, whether they follow RNTCP regimen, to know which system is followed by the medical practitioners, to know whether the practitioners have undergone training in RNTCP, to assess whether the practitioners are adhering to drug regimen as per RNTCP programme. The data was analysed using SPSS 17.0. The data was presented using descriptive studies such as frequency, percentage, mean, SD.

## RESULTS

Table: 1 shows the system followed by the medical practitioners. The maximum number of medical practitioners are Allopathic (74.6%), homeopathic (13.1%), ayurvedic (11.5%) and least Unani (0.8%). Thus, Allopathic practitioners are more in number. The table:2 indicates that 46.9% of these medical practitioners had undergone 5 days of RNTCP Training, whereas 48.5% of the medical practitioners including (allopathic, homeopathic, ayurvedic and unani) had not undergone RNTCP Training. Only 3.1% of these medical practitioners had undergone 1 day and 1.5% had undergone 3 days of RNTCP Training. The table:3 shows

51.5 % of the medical practitioners had attended TB Training course in last five years, whereas 48.5% medical practitioners had not attended TB training course in last five years. Table 4: shows 86.9% of Medical Practitioners were categorising the patients with tuberculosis as per the norms before starting the treatment whereas only 17% of the practitioners were not categorising the patients before starting the treatment for tuberculosis. Table 5 indicates that from the total of 130 medical practitioners, 114 medical practitioners (including allopathic

and homeopathic) follow different drug regimen. (80.7 %) of medical practitioners follow daily dose regimen, (12.3%) follow both daily as well as intermittent regimen and only (7%) follow intermittent drug regimen for tuberculosis. There were 16 medical practitioners who prescribed other drug regimen. Thus, this shows that private medical practitioners follow daily drug regimen more than intermittent drug regimen.

**Table No.1- System followed by Medical Practitioners.**

	Frequency	%
<b>Ayurvedic</b>	15	11.5%
<b>Homeopathy</b>	17	13.1%
<b>Allopathy</b>	97	74.6%
<b>Unani</b>	1	0.8%
<b>Total</b>	130	100.0%

**Table No.2 – Duration of RNTCP Training by practitioners.**

	Frequency	Percent
<b>0 days</b>	63	48.5%
<b>1 day</b>	4	3.1%
<b>3 days</b>	2	1.5%
<b>5 days</b>	61	46.9%
<b>Total</b>	130	100.0%

**Table No.3 – Medical Practitioners attended TB Training Course in Last five Years.**

	Frequency	%
<b>Yes</b>	67	51.5%
<b>No</b>	63	48.5%
<b>Total</b>	130	100.0%

**Table No.4 – Categorisation as per norms before starting Tuberculosis Treatment.**

	Frequency	%
<b>Yes</b>	113	86.9%
<b>No</b>	17	13.1%
<b>Total</b>	130	100.0%

**Table 5: Drug regimen for Tuberculosis**

	Frequency	%
<b>Daily regimen</b>	92	80.7%
<b>Intermittent regimen</b>	8	7.0%
<b>Both daily and intermittent regimen</b>	14	12.3%
<b>Total</b>	114	100%
<b>Other drug regimen</b>	16	-
<b>Total</b>	130	100%

■ Yes ■ No

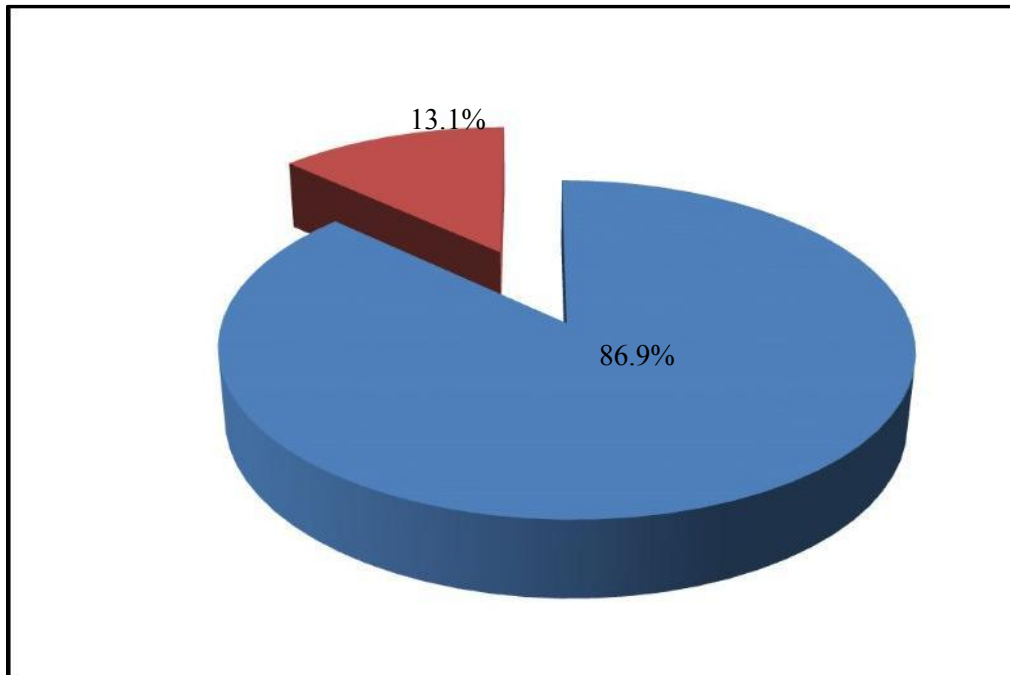


Figure 1: Categorising as per norms before starting the tuberculosis treatment.

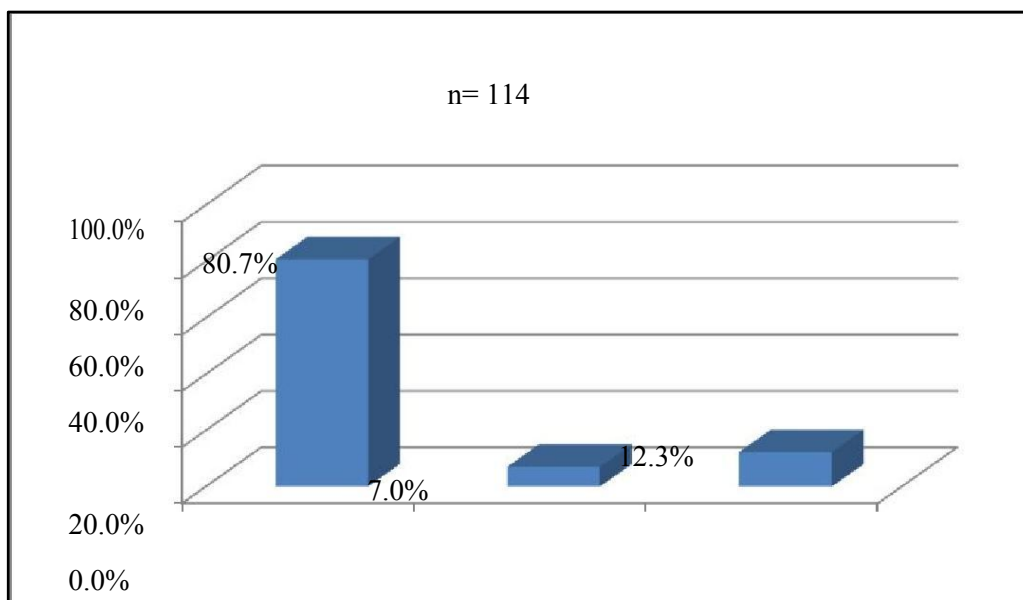


Figure 2 : Drug regimen for Tuberculosis

## DISCUSSION

The data collected through this study has helped us to know the treatment regimen prescribed by medical practitioners to patients diagnosed as tuberculosis. The treatment regimen prescribed by medical practitioners including (allopathy, homeopathic, ayurvedic and unani) use different regimen to treat the patients. India has one of the largest private health sectors in the world. This sector is often the first point of contact for a significant number of tuberculosis suspects and patients. Standard quality of care and free drugs can be provided through effective public-private collaboration under RNTCP<sup>6</sup>. Our study shows 46.9% of medical practitioners had undergone RNTCP training, the study carried out by A. Yadav et al<sup>5</sup> 43.5% had undergone RNTCP Training. The results obtained in our study were analogous to the data which is obtained in this study. The another study carried out in Pune<sup>9</sup>, 35% of practitioners were exposed to RNTCP Training. Thus, there is need to train the medical practitioners to undergo RNTCP training so that it could help them to know the principles and strategy used in RNTCP and creates awareness and provide knowledge to treat patients of tuberculosis. 86.9% of medical practitioners were categorizing patients as per norms before starting the treatment of tuberculosis in our study. S. Yadav et al<sup>10</sup> in their study found 67.5% medical practitioners were categorizing the patients as per norms, whereas in the study of J Thakur et al<sup>11</sup>, only 4% of the practitioners were categorizing correctly before starting the treatment for tuberculosis. Thus, the patient should be categorized according to category 1-new (includes all new sputum smear positive, smear negative, new extrapulmonary and new others) and Category 2-previouslt treated (includes smear positive relapse, smear positive failure, smear positive treatment after default and others)<sup>7</sup>. Our present study shows 80.7% medical practitioners prescribed daily drug regimen, 12.3% prescribed both daily as well

as intermittent drug regimen and only 7% prescribed intermittent regimen. A. Yadav et al<sup>5</sup> study showed 76% prescribed daily regimen, 26% administered both daily as well as intermittent regimen but none of them prescribed exclusively intermittent regimen. The study done by Kisalay Datta et al<sup>12</sup>, the result obtained was 73% of medical practitioners prescribed daily regimen and 27% prescribed intermittent regimen which is similar to my study.

## CONCLUSION

With the vast majority of medical practitioners, there were mostly allopathic medical practitioners who were involved in the study. The data obtained enabled us to know that medical practitioners need to follow RNTCP guidelines. The daily drug regimen was followed by medical practitioners as compared to intermittent and both daily and intermittent drug regimen. Few of the medical practitioners followed drug regimen other than RNTCP. The medical practitioners should undergo RNTCP training so as to correctly diagnose and treat the patients with rapid lasting cure from tuberculosis.

## Limitation of the study

- 1) The study area was restricted to 5 km radius from tertiary care centre.
- 2) The study could not cover large number of practitioners.

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