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Original Research Article

A Study on Diagnosis and Management of Pulmonary Tuberculosis by Private Practitioners in Bijapur City

Sowmya Bhat*, M.M.Angadi, K.A.Masali, Arun P Jose, K J Shashank, Prashant Wajantri

Department of Community Medicine, B.L.D.E.U's Shri B.M.Patil Medical College, Bijapur, Karnataka

*Correspondence Email: sowmyabhat30@gmail.com

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ABSTRACT

Background: Tuberculosis is an important public health problem in our country. In our country more than 50% of tubercular cases are treated by private practitioners. This study has been taken to assess knowledge, attitude and practice of private practitioners regarding case detection, treatment and follow up.
Objective: To study the knowledge, attitude and practice of private practitioners in the diagnosis and management of pulmonary tuberculosis.
Methodology: The study was conducted in Bijapur city during Sep- Oct 2011. This study was a cross-sectional study involving 105 private practitioners practicing allopathic or ayurvedic system of medicine. A preformed questionnaire was used to collect the information and data was analyzed using proportions.
Results: Majority i.e. 79% of practitioners consider chronic cough and fever for suspecting tuberculosis.40% practitioners consider X-ray and sputum examination for confirmation of TB.26.5% send only one sputum sample for confirmation.53.6% refer the TB case to District Tuberculosis Center.47% practitioners collect information about socio- economic status of patients.
Conclusion: The knowledge of practitioners regarding diagnosis and treatment of tuberculosis is satisfactory. But there is no measure taken by any practitioners for the follow up of defaulted patients. So improvement is needed in RNTCP training with more emphasis on follow up of patients.

Key words: management, private practitioners, pulmonary tuberculosis.

INTRODUCTION

Tuberculosis is a specific infectious disease caused by Mycobacterium tuberculosis. The disease primarily affects lungs and causes pulmonary tuberculosis. It can also affect intestine, meninges, bones and joints, lymph glands, skin and other tissue of the body. The disease is usually chronic with varying clinical manifestations.[1]

Tuberculosis remains a worldwide public health problem despite the fact that the causative organism was discovered more than 100 years ago and highly effective drugs and vaccine are available making TB a preventable and curable disease.[1]

Tuberculosis is an important public health problem in our country. Though India is the second- most populous country in the world, India has more new TB cases annually than any other country. It accounts for 1/5th of global cases. 2 out of 5 Indians are affected by tuberculosis. The national Annual Risk of Tuberculosis Infection (ARTI) being 1.5%, the incidence of new smear positive TB cases in the country is estimated as 75 new smear positive cases per 1,00,000 population. Of late, increase in incidence of MDR-TB cases has been reported.[2]

National tuberculosis control programme was launched in our country in the year 1962. The programme was modified as Revised National Tuberculosis Control Programme in the year 1992. In order to improve the compliance of the cases the regime was reduced from 18-24 months to 6-8 months, with introduction of powerful bactericidal drugs. Case detection with quality microscopic examination and service of DOTS agent were introduced to enhance the cure rate.1 Though RNTCP has made good inroads in to the problem it has not achieved the objectives of case detection rate (70%), cure rate (85%) and in the field of public private partnership.

In our country more than 50% of tubercular cases are treated by private practitioners.[3,4] This study has been taken to assess knowledge, attitude and practice of private practitioners regarding case detection, treatment and follow up.

MATERIALS AND METHODS

Study design: Cross- sectional Study Design.

Source of Data: The study was conducted on a total of 105 private practitioners of which 45 were allopathic and 60 were ayurvedic.

Study area: Bijapur city, Karnataka State.

Duration of study: September- October 2011.

Study technique: informed consent was taken from the practitioners. The interview technique was used to collect data and entered in a pre-structured proforma. The result was analyzed using percentages and proportions and presented in the form of tables and figures.

RESULTS

6(50%) of the physicians (MD, Allopathic), 22(66.6%) MBBS graduates and 23(43.3%) Ayurvedic practitioners were practicing for > 10 years. 12 physicians, 33 MBBS doctors and 53(out of 60) BAMS doctors see cases of tuberculosis. All the physicians see > 15 TB cases/ year while 20(60%) MBBS doctors see 1-10 cases/ year and 35(65%) BAMS doctors see 1-10 cases/year (Table 1).

The main symptoms used to suspect TB is chronic cough and fever 77(78.57%), which is followed by chronic cough, fever and weight loss 13(13.26%). However 8(8.16%) BAMS practitioners considered only chronic cough for suspecting TB (Table 2).

5 (41.6%) physicians use clinical examination and sputum results for confirmation whereas 7 (58.3%) insist for X-ray along with clinical examination and sputum results for confirmation. Regarding MBBS doctors 15 (45.45%) use clinical examination and sputum results for confirmation and 18 (54.54%) use X-ray along with other 2 criteria. Majority 31(58.49%) BAMS doctors use clinical examination and X-ray for confirmation followed by 14(26.41%) use clinical examination, X-ray and sputum examination for confirmation of TB (Table 3).

Table 1: Profile of Private Practitioners.

VARIABLE	MD	MBBS	BAMS
1. No. Of Doctors interviewed	12	33	60
2. No. Of years of practice a) < 2	0	1(3.03%)	4(7.5%)
b) 2-5	4(33.3%)	1(3.03%)	11(20.75%)
c) 5-10	2(16.6%)	9(27.27%)	22(41.5%)
d) >10	6(50%)	22(66.6%)	23(43.3%)
3. No. Of TB cases/ year a) 1-5	0	10(30.3%)	18(33.9%)
b) 5-10	0	10(30.3%)	17(32.07%)
c) 10-15	0	6(18.18%)	8(15.09%)
d) >15	12(100%)	7(21.2%)	10(18.8%)
4. Treatment a) self	12(100%)	24(72.72%)	3(5.66%)
b) referred	0	9(27.27%)	50(94.33%)
5. Place of reference a) govt. hospital	0	9(100%)	43(86%)
b) private hospital	0	0	7(14%)

Table 2: Distribution According To Symptoms Used For Diagnosis.

Symptoms	MD	MBBS	BAMS	Total
1)Cough	0	0	8(15.09%)	8(8.16%)
2) fever	0	0	0	0
3) cough and fever	8(66.66%)	24(72.72%)	45(84.9%)	77(78.57%)
4) cough, fever and weight loss	4(33.33%)	9(27.27%)	0	13(13.26%)
Total	12	33	53	98

Table 3:Distribution according to investigation done for confirmation.

TESTS	MD	MBBS	BAMS
1.Only clinical	0	0	2(3.7%)
2.Only sputum	0	0	0
3.Only X-ray	0	0	0
4.Clinical and sputum	5(41.6%)	15(45.45%)	6(11.32%)
5.Clinical and X-ray	0	0	31(58.44%)
6.Clinical, sputum and X-ray	7(58.3%)	18(54.54%)	14(26.41%)
NUMBER OF SPUTUM			
1. 0	0	0	33(62.26%)
2. 1	2(16.6%)	8(24.24%)	16(30.18%)
3. 2	4(33.3%)	9(27.27%)	0
4. 3	6(50%)	16(48.48%)	4(7.54%)

With regard to number of sputum sample examination there is wide variation amongst the physicians. 6 (50%) advice 3 sputum sample, 4 (33.3%) advice 2 sputum sample and 2 (16.6%) advice only one sputum sample. The same trend is seen with MBBS and BAMS doctors. Whereas RNTCP advice for 2 sputum samples for confirmation. 33 (62.26%) out of 53 BAMS doctors do not send sputum for AFB for confirmation (Table 3).

All physicians and MBBS practitioners categorize and treat the TB cases as per the RNTCP guideline. 3(5.66%) BAMS doctors do not follow RNTCP guidelines in treatment. 9(100%) MBBS doctors, 43 (86%) BAMS doctors refer the cases to District tuberculosis centre and 7(14%) BAMS doctors refer cases to private practitioners (Table 4).

Table 4: Distribution Of Practitioners Based On Treatment Plan.

1.TREATMENT	MD	MBBS	BAMS	TOTAL
SELF	12(100%)	24(72.72%)	3(5.66%)	39(39.79%)
REFERRED	0	9(27.27%)	50(94.33%)	59(60.2%)
2.PLACE OF REFERENCE a.Govt.hospital	0	9(100%)	43(86%)	52(88.13%)
b.private hospital	0	0	7(14%)	7(11.86%)

DUSCUSSION

The RNTCP being primarily implemented through the government network of institutions and health providers. The RNTCP therefore cannot hope to achieve its objectives unless public private mix is a success. This study revealed good knowledge base, attitude, and practices amongst the doctors with regards to treatment of pulmonary TB.

In the present study 78.57% practitioners consider chronic cough and fever for suspecting tuberculosis, which is comparable to study done by Solomon A Yimer, Carol Holm Hansen, Gunnar A Bjune where 88% practitioners do so.[5]

40% practitioners consider X-ray and sputum examination for confirmation of TB, which is similar with the study done by Mubashir Ahmed where 68% of practitioners depend upon combination of tests such as X-ray, sputum microscopy and ESR. In our study 26.53% consider sputum microscopy as diagnostic test whereas only 14% consider sputum microscopy as diagnostic test in a study by Mubashir Ahmed.[6] In our study26.5% of practitioners send only one sputum sample for confirmation.

53.06% practitioners refer the TB case to DTC as compared to 20% in other study done by J S Thakur which is a positive point of the study. Majority of practitioners treat TB patients according to RNTCP guidelines which is a good sign. In a study done by J.S.Thakur et al 88.4% of private practitioners were not prescribing the treatment regimen recommended by RNTCP.[7] In another study done by Singla et al only 29.4% of the practitioners were using the regimen recommended by the RNTCP.[4]

46(46.93%) practitioners collect information about socio- economic status of patients. There is no strategy followed by any practitioners for follow up of default patients like in other studies.

CONCLUSION AND RECOMMENDATIONS

The knowledge of practitioners about symptoms of tuberculosis and treatment schedule is satisfactory. But there is a wide variation in the methods used for confirmation of tuberculosis. There is no provision for follow up of default patients or intimation about such cases to DTC.

It is disheartening to know that most of the practitioners do not collect socio-economic profile of the patient to ascertain whether the patient takes full course of treatment prescribed by them. CME programs should be conducted under RNTCP by DTO for all private practitioners irrespective of system of medicine they are practicing. During such CME emphasis should be on educating them about the national guidelines and the importance of acquiring socio-economic details of the patients.

This will lead to a subsequent increase in early detection and referral of cases to DTC and an improvement in patient compliance, which will eventually help us in our relentless battle against tuberculosis.

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