

Management of Tuberculosis by the General Practitioners of Vadodara City

R.K. Baxi, A.R. Shah

Introduction

India has more cases of tuberculosis than any other country. It is generally agreed that currently in India there are about 14 million suspected and about 3.5 million bacteriologically proven cases of pulmonary tuberculosis with prevalence rate of 4.84/1000 population¹. The majority of the patients who go to TB clinics have typically been under care of general practitioners (GPs) at one stage or another². Thus GPs can be useful in providing proper diagnosis, treatment, notification of cases and proper health education in the community. There are 310 allopathic (MBBS) GPs practicing in Vadodara city (as per GP Association records). Majority of them are doing practice for 10 to 20 years. GPs in our study were not given orientation training in RNTCP before conducting the study. The purpose was to know and understand how tuberculosis is being managed currently Vis a Vis RNTCP guidelines and then make suggestions.

Material and Methods

Present study, is a cross-sectional study conducted in Vadodara city in October 2003. There are three Tuberculosis Units (TU) and ten Designated Microscopic Centres (DMC) in Vadodara city. Random selection of three DMC-areas, one representing each TU was done (Bavachavad, Fatehpura and Nava yard). Total GPs holding MBBS degree in above three DMC areas are 112 (From the list of GP Association, Vadodara city). 50 GPs of these, who agreed voluntarily to participate, were selected from above list, but 5 GPs refused to participate at the time of interview because of heavy OPD work. No effort was made to get equal distribution of respondents among 3 DMC areas. Pre tested semi-structured proformae were canvassed to these 45 respondents. Information regarding clinical suspicion of Tuberculosis, confirmation of diagnosis by laboratory investigation, treatment regimens and health education were collected from these General Practitioners.

Results

In Vadodara city, majority of GPs had good OPD practice. 60% had OPD patients between 50 to 100 per day and 11% had over 100 OPD patients per day.

Table-I shows that GPs had good knowledge of symptomatology of tuberculosis for suspecting tuberculosis as a possible diagnosis. But for the confirmation of diagnosis all 45 (100%) were giving first preference to X-RAY and

CBC/ESR. Only 26(57.77%) asked for sputum examination but it was second preference (see Table-II). Out of these 26(57.77%) only 8(30.76%) did sputum examination for three times, as per RNTCP recommendation. 14(53.84%) did once and 4(15.38%) did it for twice.

Table I: Approach and Modes of diagnosis of TB by GPs (n= 45)

Symptoms	No. (%)	Modes	No. (%)
Cough >3 wks.	40 (88.88)	X ray	45(100)
Weight loss	38 (84.44)	CBC/ESR	45(100)
Anorexia	34 (75.55)	Clinical	43 (95.55)
Low grade fever	23 (51.11)	Sputum	26 (57.77)
Hemoptysis	19 (42.22)	MT	3 (6.66)

After diagnosis, 19(42.22%) GPs treated the patient but not as per RNTCP categorization. 26(57.78%) didn't treat but referred the patients. 69.23% of those who referred patients, did so to TU or Private hospital (physician) according to affordability of patients, and 30.76% referred to private hospital as per patients choice of consultant. Though treatment of TB under RNTCP is free of cost, it is not quite clear to GPs and is not correctly communicated to patients.

Table II: Different Regimens Used by GPs to Treat TB Patient. (n=19)

No.	Regimens	No. (%)
1	2(HRZE) + 6(HR)	8(42.10)
2	2(HRZE) + 6(HRE)	3(15.78)
3	2(HRZE) + 4(HRE)	2(10.52)
4	2(HRZE) FOR 6 MONTHS	2(10.52)
5	2(HRZE) + 3(HRE) + 3(HR)	2(10.52)
6	2(HRZE) + 4(HR)	1(5.26)
7	2(HRZE) + 1(HRE) + 5(HR)	1(5.26)

Table-II shows that the GPs, treating cases used seven different anti-TB drug regimens. For intensive phase all of them gave four drugs anti TB medicines and Medicines were given as daily doses and unsupervised. Variation found in continuation phase, make treatment expensive and irrational.

15 (78.94%) GPs didn't have record of tuberculosis cases. The need for them to keep proper records appears to be a hurdle in their active partnership with RNTCP. 41(91.11 %) of GPs didn't screen the family members.

Discussion

GPs have good clinical knowledge to diagnose tuberculosis but lack in knowledge of RNTCP. All the GPs were aware

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Department of Preventive and Social Medicine, Government Medical College, Vadodara, Gujarat.

E-mail : baxirk@gmail.com

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of the symptoms of early manifestations of tuberculosis. GPs relied more on CBC/ESR and X-ray for confirmation of clinical diagnosis and only 57.77% relied on sputum examination. A study conducted by Uplekar MW and Sheela Rangan in Bombay, (1993) reported that only 38% GPs relied on sputum examination³. Only 30.76% of the 57.77% did sputum examination for three times, as per RNTCP recommendation. So over diagnosis of tuberculosis patients on the basis of X-ray subject the patient to unnecessary, expensive and potentially toxic medicines. To prevent over diagnosis, sputum examination should be mandatory, for that GPs should send/refer patient to nearest DMC for sputum examination.

Nearly half of GPs were treating patient after diagnosis, but no one had adequate knowledge of categorizing the tuberculosis patient. Majority of GPs didn't know the category of tuberculosis patient as per RNTCP guideline, so they didn't categorize the patient and put patients on treatment directly. 57.78% of GPs didn't treat the patient and referred patients to hospital / consultants. In spite of free treatment available under RNTCP, majority referred patients to TU or private hospital according to affordability of the patient and 30.76% referred to private hospitals only. This pattern of referral affects the notification of tuberculosis cases. GPs can counsel tuberculosis patient about availability of good quality treatment, free of cost at TU / DMC under RNTCP.

The GPs, who treated cases, used seven different anti-TB drug regimens- none of which confirmed to RNTCP guideline. The treatment was costly, nearly 2500 rupees to patient and it was inappropriate and irrational. It was administered as daily doses and unsupervised. Majority GPs didn't have record of TB patient and they didn't want to keep it. Majority GPs didn't screen the family member of TB patient, so hidden infectious cases and contacts can't be traced. Contacts of the tuberculosis patient are 10 to 60 times more likely to have a disease than the general population according to some studies^{4,5} and approximately 10-14% of all notified cases have been detected by contact screening^{6,8}. Health worker under RNTCP can take over home visits and family contacts can be assessed for TB, though, active case finding is not a priority under RNTCP.

Regarding health education, majority were giving good health education about nutrition and medicines. Correct advice on safe disposal of sputum was not given to the patient and GPs didn't emphasis on stopping smoking. These two important

components of health education need further emphasis.

As majority of GPs do not know the rationale of RNTCP, they do not follow it. RNTCP itself has a component of training and demonstration to paramedical staff and General Practitioners, but from the present study, it is apparent that this area of activities needs strengthening. There are schemes under the RNTCP for collaboration between private practitioners and government, but GPs don't know about the schemes, so encouraging willing practitioners to participate in the programme is a need. There is a need for better communication between the private doctors and those implementing disease control programme, so as to enable them to follow appropriate clinical and public health practices.

Recommendations

1. GPs should be given regular RNTCP orientation training. It can be planned jointly with their professional organization and RNTCP.
2. Every GP should be informed to send/refer each suspected case to nearest DMC for sputum examination.
3. Advocacy of the schemes to ensure participation of general practitioner into RNTCP.

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