Original Research Article

A study of health seeking behaviour and assessment of knowledge regarding tuberculosis amongst new cases of pulmonary tuberculosis

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Abstract

Background: India is a developing country and caters almost one-fourth of the burden of Tuberculosis (TB) cases worldwide. Also we have a huge number of illiterate population and a wide variety of health services causing a big problem for TB control. **Aims and objectives:** To study health seeking behaviour and assessment of knowledge regarding tuberculosis amongst new cases of pulmonary tuberculosis. **Methodology:** A cross sectional, descriptive study of sputum smear positive 100 patients, who were interviewed by using a predesigned questionnaire. For assessment of knowledge among TB patients, the questionnaire. The data obtained is then statistically analysed. **Results:** Only 37.0% patients knew the symptoms of TB. About 56.0% knew that TB is an infectious disease while 90.0% knew that it is a curable disease. All patients (100.0%) knew that treatment of TB is free and 94.0% agreed that TB is a social stigma. Only 28% and 33.0% knew the most common body part affected and the time for the disappearance of symptoms respectively. About 82.0% agreed that TB may become life threatening if untreated and 84.0% knew the duration of treatment for complete cure. The first consultation of 64.0% TB patients was with the private practitioners. The rest (36.0%) visited government health centre. **Conclusion:** Socio-economical development along with improvement in the literacy rate should be the prime areas of focus so as to change the health seeking behaviour and shorten the delay in diagnosis of tuberculosis.
Key words: Health seeking behaviour, knowledge, Tuberculosis.

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INTRODUCTION

Tuberculosis (TB) disease has challenged mankind since ages and unfortunately remains as a global public health challenge even today, despite enormous advances in medicine and rapid expansion of health system facilities. As per Global TB Report 2017, India caters for one fourth of global TB cases with 2.8 lakhs incident cases, out of which 4.3 lakhs people died of the disease.[1] In the last couple of decades there is also an increasing incidence of Multi-drug resistant TB (MDR-TB) & Extensively drug resistant TB (XDR-TB) globally as well as in India. Amongst the various reasons for this alarming situation of TB in India, there are some salient behavioural, socio-econimal and cultural practices which lead to this TB disaster. Although many studies across the globe have studied the factors associated with health care seeking behaviour & knowledge regarding TB, there are very few Indian studies and there is a need to understand these

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factors in diverse social and cultural communities in India.

AIM AND OBJECTIVES

1. To study health seeking behaviour of tuberculosis patients.
2. To assess the knowledge of the patients regarding tuberculosis.

MATERIAL AND METHODS

A cross sectional, descriptive study of sputum smear positive patients attending TB and Chest Diseases Hospital of Govt. Medical College, Amritsar was performed from 1st June 2011 to 31st May 2012 for a study period of one year after taking approval from ethical committee. The inclusion criterias for the patients under study were as follows:

a) Sputum smear positivity (Newly diagnosed Pulmonary TB cases)
b) Age >15 years and
c) Duration of symptoms >2 weeks.

A total of 100 patients were interviewed by using a predesigned questionnaire after taking informed consent and strict confidentiality was maintained regarding their identity and responses. For assessment of knowledge among TB patients, the questionnaire consisted of mostly previously fixed response options like Yes/No/Don't know/Multiple choices and rest of the questions were of brief narration type. The qualitative data thus obtained was tabulated and subjected to statistical analysis using Chi-square test without Yate's correction so as to know the association was significant or not i.e. 'p' value was calculated.

OBSERVATIONS

A total of 100 cases of tuberculosis aged 15 to 72 years attending TB and Chest Diseases Hospital were included in this study to evaluate the health seeking behaviour and to assess their knowledge regarding tuberculosis disease. The observations of the study as tabulated and are as follows.

Table 1: Table illustrating health seeking behaviour among the study population as per their first place of presentation

Place of presentation	No. of cases	Percentage
Private hospital	64	64.0
Govt. hospital	36	36.0
Traditional healer	0	0.0
Total	**100.0**	**100.0**

Table 2: Factors determining the visit to government or private health facility

Sr. No	Characteristics	Health Facility		Total	'p' value
		Govt. n (%)	Private n (%)		
1.	**Age**				
	<40 years	08 (36.36%)	14 (63.64%)	22	>0.05
	40-60 years	14 (46.67%)	16 (53.33%)	30	
	>60 years	14 (29.17%)	34 (70.83%)	48	
2.	**Sex**				
	Male	16 (42.10%)	22 (57.89%)	38	>0.05
	Female	20 (32.26%)	42 (67.74%)	62	
3.	**Educational status**				
	Illiterate	31 (49.21%)	32 (50.79%)	63	**<0.05**
	Literate	05 (13.51)	32 (86.49%)	37	
4.	**Marital status**				
	Married	34 (40.48%)	50 (59.52%)	84	**<0.05**
	Single	02 (12.50%)	14 (87.50%)	16	
5.	**Addictions**				
	Yes	16 (80.0%)	04 (20.0%)	20	**<0.05**
	No	20 (25.0%)	60 (75.0%)	80	
6.	**Past history of chronic Medical illness**				
	Yes	15 (45.46%)	18 (54.55%)	33	>0.05
	No	21 (31.34%)	46 (68.66%)	67	
Total		**36 (36.0%)**	**64 (64.0%)**	**100 (100.0%)**	

Table 3: Knowledge about tuberculosis amongst study population

Knowledge about TB	No. of cases	Percentage
Knows symptoms of tuberculosis	37	37.0
Knows TB is an infectious disease	56	56.0
Knows TB is a curable disease	90	90.0
Knows treatment of TB is free	100.0	100.0
Thinks TB is a social stigma	94	94.0
Knows the most common part affected by TB	28	28.0
Knows TB becomes life threatening if untreated	82	82.0
Knows time for disappearance of symptoms	33	33.0
Knows duration of treatment for complete cure	84	84.0

Table 4: Knowledge score among study subjects and Patient Delay

Sr. No	Knowledge level	Knowledge score	No. of patients
1	Unsatisfactory	≤5/9	82 (82.0%)
2	Satisfactory	>5/9	18 (18.0%)

DISCUSSION

TB is the cause of a large burden of disease in developing countries like India. TB is a completely curable disease with six to eight months of Anti-tubercular treatment (ATT) in cases of drug sensitive TB. TB carries a social stigma in developing countries like India and thus poses a great hurdle to control it. The DOTS strategy, recommended by the World Health Organization (WHO) for the prevention and control of TB, relies on passive case finding by sputum smear microscopy.[2] Suspects are therefore expected to be able to recognize TB symptoms and have positive attitudes towards TB being managed by formal health services. Successful implementation of DOTS relies on TB patient's prompt access to high-quality health care facilities, accurate diagnosis and adherence to TB treatment. Various studies have found delays in TB case detection associated with poor perception of the health services,[3, 4] fear of stigmatisation,[5] lack of knowledge about TB and traditional beliefs.[6] Knowledge of study subjects was assessed for symptoms, infectiousness, social beliefs and treatment of tuberculosis by using a set of questions. Only 37.0% knew the symptoms of tuberculosis. About 56.0% knew that tuberculosis is an infectious disease while 90.0% knew that it is a curable disease. All patients (100.0%) knew that treatment of tuberculosis is free and 94.0% agreed that tuberculosis is a social stigma. Only 28% and 33.0% knew the most common body part affected and the time for the disappearance of symptoms respectively. About 82.0% agreed that tuberculosis may become life threatening if untreated and 84.0% knew the duration of treatment for complete cure. The knowledge questionnaire contained nine questions**.** Based on total number of correct answers given, subjects were classified into two categories. Those who correctly answered more than five questions out of nine were considered to have satisfactory knowledge. Less than five correct answers were considered to have unsatisfactory knowledge. This criteria was fixed based on the median value. 82.0% patients had unsatisfactory knowledge on tuberculosis where as only 18.0% had satisfactory knowledge scores. In comparison to patients who had satisfactory knowledge patient delay was more in those who had unsatisfactory knowledge scores (22.22% Vs.78.04%). The association was found to be significant ('p' value <0.05). The first consultation of 64.0% tuberculosis patients was with the private practitioners. The rest (36.0%) visited government health centre. No patient was presented to traditional healer. These findings were in accordance with findings from many other studies in India and abroad. Some of the Indian studies by Rajeshwari. R *et al*[7], Ashoo Grover *et al*[8], Sanganthi P et al [9],Dinesh M. Nair *et al*[10], have found that nearly half prefer private practitioners for their first consultation. The factors influencing study subjects to first contact government or private health facilities were as follows:

- As the age increased, proportion of subjects consulting private facilities was more, but not statistically significant ('p' value >0.05)
- Females have preferred private facilities (67.74%) over government facilities when compared with males (57.89%), but not statistically significant ('p' value >0.05).
- Higher the educational status, higher is the proportion of them going to private health facility (86.49% Vs 50.79%; p<0.05).
- Single subjects approached private facilities more as compared to those who were married (87.50% vs. 59.52; p<0.05).
- Patients with history of addiction to alcohol and smoking approached private facilities significantly more when compared with non-addicts (75.0% Vs 20.0%; p<0.05).

CONCLUSION

H7uBehavioral change among the family members for the elderly and females is must. Majority of the patients seek private health facilities, resulting in delay in diagnosis. Efforts should be done so that patients should have easy accessibility to Govt. health facilities. Mass media such as television is an effective vehicle for spread of information about the tuberculosis symptoms and treatment for both literate and illiterates. Socio-economical development along with improvement in the literacy rate should be the prime areas of focus so as to

change the health seeking behaviour and shorten the delay in diagnosis of tuberculosis.

REFERENCES

1. India TB Report 2018, RNTCP Annual Status Report, Central TB Division, Ministry of Health & Family Welfare, New Delhi, page no. 9.
2. World Health Organization. WHO tuberculosis programme. Framework for effective tuberculosis control. WHO/TB/94. 179. Geneva, Switzerland: WHO. 1994.
3. Godfrey-Faussett P, Kaunda H, Kamanga J, et al. Why do patients with a cough delay seeking care at Lusaka urban health centres? A health systems research approach. Int J Tuberc Lung Dis. 2002; 6: 796–805.
4. Yimer S, Bjune G, Alene G. Diagnostic and treatment delay among pulmonary tuberculosis patients in Ethiopia: a cross sectional study. BMC Infect Dis. 2005; 5: 112.
5. Getahun H. Medical and social consequences of tuberculosis in rural Ethiopia. Ethiop Med J. 1999; 37: 147–153. in rural Ethiopia. Ethiop Med J. 1999; 37: 147–153.
6. Shetty N, Shemko M, Abbas A. Knowledge, attitudes and practices regarding tuberculosis among immigrants of Somalian ethnic origin in London: a cross-sectional study. Commun Dis Public Health. 2004; 7: 77–82.
7. Rajeshwari.R, Chandrashekar V, Suhadev M, Sivasubramaniam S, Sudha G., Renu G. Factors associated with patient and health system delays in the diagnosis of tuberculosis in South India. Int J Tuberc lung Dis. 2002; 6(9):789-795.
8. Ashoo Grover, Rajesh Kumar, Jindal SK. Treatment seeking behaviour of chest symptomatic. Ind J Tub. 2003; 50: 87-94.
9. Sanganthi P, Chadha VK, Ahmed J, Umadevi G, Kumar P, Srivastava.R et al. Health seeking and knowledge about tuberculosis among person with pulmonary symptoms and tuberculosis cases in Bangalore slums. Int J Tuberc lung Dis. 2008; 12(11): 1268-1273.
10. Dinesh M Nair, Annie George, Chacko KT. Tuberculosis in Bombay: New insights from poor urban patients Health policy and planning. 1997; 12: 77-85

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