Awareness of tuberculosis among patients attending rntcp at siddhartha medical college ,vijayawada

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ABSTRACT

Background: Tuberculosis is one of India's major public health problems. According to WHO estimates, India has the world's largest tuberculosis epidemic. Public awareness about its causative organism, modes of spread, diagnosis, treatment, and prevention plays an important role in TB control. The present study was carried out to assess awareness of Tuberculosis among patients attending tertiary care hospital (Siddhartha Medical College) **Methodology**: A cross sectional observational study was conducted among 100 patients taking treatment at Siddhartha Medical College, Vijayawada using a preformed questionnaire. The questionnaire contains socio-demographic variables such as age, sex, religion, literacy status, and knowledge about symptoms, mode of transmission, aetiology, Investigations, prevention and treatment of tuberculosis **Results**: Out of these 100 Patients 97% were aware that Tuberculosis is an infectious disease. Regarding symptoms only 69% identified cough more than 2 weeks as an important warning sign for Tuberculosis. Regarding investigations only 69% were aware that sputum test was done for diagnosis of Tuberculosis. Only 60% knew DOTS as treatment for Tuberculosis. Only 56% were aware that Tuberculosis is most common in HIV individuals. **Conclusion**: The current study revealed that although awareness regarding certain basic aspect of tuberculosis was adequate; however there is a great need to improve awareness about the symptoms and treatment of tuberculosis.

Key words: Awareness, Knowledge, Pulmonary tuberculosis.

Introduction

Though India is the second-most populous country in the world one fourth of the global incident TB cases occur in India annually. In 2012, out of the estimated global annual incidence of 8.6 million TB cases, 2.3 million were estimated to have occurred in India[1]. Several factors have been identified including the individual's perception of disease, socioeconomic level, extent of awareness about the disease and dots centre. TB knowledge among population is important for the early detection and treatment of people with TB, a factor that determines the success of TB control interventions[2].

*Correspondence Dr. S.N. Mani Devi Karampudi Room NO:FF4, PG womens hostel, Siddhartha medical college, Vijayawada, Andhra Pradesh, India Email: drmanikarampudi@gmail.com Revised National Tuberculosis Control Programme (RNTCP) adopted passive surveillance strategy of the chest symptomatic for identification of cases of PTB. Therefore, it is utmost important that the basic information about PTB and services provided under the program is clear in community. So the present study was carried out to assess awareness about Tuberculosis.

Material and Methods

A cross sectional study was conducted at RNTCP Siddhartha medical college vja. It contains 6 DMCs covering a population of 5 lakh. The study was conducted among the 100 patients (study subjects) aged 15 – 65 years attending RNTCP for sputum examination and treatment. The data for the study was collected from September 8th to September 22^{nd} (3 wks) through a preformed questionnaire. The questionnaire contains socio-demographic variables

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such as age, sex, religion, literacy status, and knowledge about symptoms, mode of transmission, etiology, investigation, prevention and treatment of tuberculosis. Each interview lasted for about 30 minutes. The collected data was entered in Microsoft Excel for suitable statistical analysis and inferences were drawn.

Results

A total of 100 patients (study subjects) between the age group of 15 - 65 years suffering from Pulmonary tuberculosis were interviewed. Out of these 100 Patients 78 were males and 22 were females. Majority of the patients, 78 were Hindus while rest were Muslims and Christians. As far as literacy status was concerned, 58 (58%) were illiterate. 97% of them were aware that TB is an infectious disease. 82% were aware that lungs were the most common site of infection. 69% identified greater than 2 weeks cough as important warning sign for TB. 74% were aware that covering mouth with hanky prevent spread of infection. Only 69% were aware that sputum test was done for diagnosis of TB. Only 56 % knew that TB is a curable disease and 53% knew it as a preventable disease. Only 60% know DOTS as treatment for TB. Only 65% know that DOTS is free and 70% know that treatment for TB is 6-8 months. Only 51% were aware that TB is most common in HIV individuals.

Table 1: Base line socio demographic characteristics of study

S.No.	Variable				No	percentage
1.	Age					
		15-25			19	19
		26-35			26	26
		36-45			26	26
		45-55			16	16
		>56			13	13
2.	Gender					
		Male			78	78
		Female			22	22
3.	Religion					
		Hindus			78	78
		Muslims			10	10
		Others			12	12
4.	Education					
		Literate			42	42
		Illiterate			58	58
5.	Income					
		<1500Rs.			68	68
		>1500Rs.			32	32
		Table 2: Relations	hip of knov	wledge of Tub	erculosis with sex	
S. No.				MALE	FEMALE	%
1.	TB is Infectious Disease		Yes	75	22	97
			No	03	0	3
2.	TB mostly affects lungs		Yes	61	21	82
			No	14	01	15
2	0 1.0	voolvo ovoroot TD	Vas	51	15	60

3.	Cough >2 weeks suspect TB	Yes	54	15	69
		No	21	7	28
4.	Covering mouth with Hanky prevent spread of TB	Yes	58	16	74
		No	17	6	23

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5.	Sputum test is used for detection of TB	Yes	52	17	69
		No	23	5	28
6.	TB is Curable Disease	Yes	43	13	56
		No	32	9	41
7.	TB is Preventable Disease	Yes	40	13	53
		No	35	9	44
8.	Treatment of TB is DOTS	Yes	48	12	60
		No	27	10	37
9.	DOTS is used for 6-9 Months	Yes	55	15	70
		No	20	7	27
10.	DOTS is issued for Free	Yes	58	17	65
		No	17	5	22
11.	Adverse Reactions occur while using ATT	Yes	59	20	79
	C C	No	16	2	18
12.	TB mostly affects HIV infected People	Yes	38	13	51
		No	37	9	46

Discussion

Tuberculosis (TB) is a serious public health problem in India as it ranks first among 22 high burden countries, causing immense morbidity, mortality. Several factors have been identified including the individual's perception of disease, socioeconomic level, extent of awareness about the disease and dots centre. The mass survey carried out by Central TB Division, Ministry of Health, Government of India, reported poor level of awareness among general population and very poor among disadvantaged section of the society. This one had been identified as challenge impeding progress toward TB control. In view of this, the present study was carried out to assess the awareness about TB disease, spread, treatment, prevention

TB is more prevalent in men than in women may be due biological vulnerability of men to infections or exposure at work place. 71% were from the economic productive age group. Wandwalo E.R. & O. Merkve. (2000) also observed 69% of pulmonary TB cases belongs to the \leq = 45 age group.[3]

Our study showed a literacy rate of 42% only. Literacy has been identified as the key deciding factor for level of awareness. The KAP study among sandstone quarry workers in Rajasthan, conducted by Yadav *et al*, showed literate people having significantly higher level of awareness and knowledge regarding TB[4].

In the present study, important questions about cause, mode of transmission, curability and its prevention regarding TB knowledge were assessed. 97% of them were aware that TB is an infectious disease similar to the study conducted in rural Delhi in 2006 with more than 95% participants being aware of cause of TB[5].

Only 69% know that cough for 2 weeks as a warning sign of TB. As regard the investigation to be carried out for tuberculosis, 69% stated sputum examination is done for detection of tuberculosis. Similarly in a study conducted at DOTS Centre, Safdarjung Hospital, New Delhi, 62.6% of the patients were of the opinion that for diagnosis of tuberculosis sputum examination was the most preferred test followed by X-ray.[6]

53 % cases told that TB can be prevented & 74 % responded to cover face at the time of cough as a precaution to avoid the spread of TB. These findings were similar with Dr Amol R Patil *et al* [7]Malhotra *et al* [8] studies.

56% of the participants answered that tuberculosis is curable. Malhotra *et al* [8] and Yadav SP [4] *et al* observed more percentage about TB curability than our study. But these studies were conducted among the general population and the education standards are not comparable between different populations.

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The duration (6 - 9 month) was correctly known to 70% of the patients. Pre treatment counselling about the course of the SCC including Intensive Phase and Continuation Phase should be imparted among the pulmonary TB patients initiated on DOTS.

About 35% were not aware of the free treatment for TB. Residents of slums are more vulnerable because of overcrowding and poverty and should be more aware of the free treatment. Treatment of TB is generally costlier in private settings pushing the family into poverty trap, and it may lead to treatment default after few weeks of treatment.

Only 51% were aware that tuberculosis as the commonest oppurtunistic infection in HIV. Unlike most other infections in AIDS patients, tuberculosis is transmissible to the general public. Delays in diagnosis because of unusual clinical or radiographic presentations constitute a significant public health hazard.

References

- 1. TB INDIA 2014 Revised National TB Control Programme ANNUAL STATUS REPORT
- 2. Rajeswari R, Balasubramanian M, Muniyandi S, Geetharamani S, Theresan X. Socioeconomic impact of tuberculosis on patients and family in India. *Int.J.tubercul lung dis.*3(10):869-877
- **3.** Wandwalo E.R. & O.Merkve. Knowledge of disease and treatment among TB patients in Mwanza, *Tanzania International journal of TB & lung disease*. 2000; 4(11):1041–46.
- 4. Yadav SP, Mathur ML, Dixit AK. Knowledge and attitude towards tuberculosis among sandstone quarry workers in desert parts of Rajasthan. *Indian J Tuberc* 2006;53:187-955
- 5. Fochsen G, Deshpande K, Diwan V, Mishra A, Diwan VK, and A. Thorson. Health care seeking among individuals with cough and tuberculosis: a population-based study from

Conclusion

Although awareness regarding basic aspects of tuberculosis was adequate;knowledge about prevention, curability and free treatment of tuberculosis should be stressed. Periodic KAP (knowledge, attitude and practice) surveys will help in identifying the deficiencies in knowledge and practices of the community thereby providing clues to improve the performance of RNTCP.

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rural India. Int J Tuberc & Lung Dis 2006; 10(9): 995 – 1000.

- 6. Matta S, Singh D, Bhalla S, Rasania S, Singh S and Sachdev TR. A study on knowledge and family attitude of patients regarding Pulmonary Tuberculosis attending the DOTS Center of Safdarjang Hospital, New Delhi. *Indian J. Prev. Soc. Med.* 2005; 36/1&2: 16 –20.
- Dr Amol R Patil *et al* Knowledge About Tuberculosis and DOTS Centre Among Newly Registered Pulmonary TB Patients Under DOTS Centre's Located in a Municipal Ward of Metropolitan City, Maharashtra. *JMSCR* 2014;2(4): 584-593.
- 8. Malhotra R, Taneja DK, Dhingra VK, Rajpal S, Mehra M. Awareness regarding TB in a rural population of Delhi. *Ind J Comm Med.* 2002;27:62-8.

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