

KNOWLEDGE, ATTITUDE AND PRACTICE OF TUBERCULOSIS AMONG TB AND GENERAL PATIENTS AT URBAN PRIMARY HEALTH CENTER, CBD BELAPUR, MUMBAI, MAHARASHTRA.

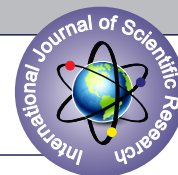
Public Health

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ABSTRACT

Background: Totally 10.4 million new tuberculosis cases are found during the year 2016 worldwide and 64 percentage of the cases are from India, Indonesia, China, Philippines, Pakistan, Nigeria and South Africa.

Methods and Design: A cross sectional quantitative study was conducted. For the purpose of getting data on the knowledge of general patients and treatment seeking behavior of TB patients. A complete enumeration sampling technique was employed for collection of data from TB patients via household survey; simple random sampling technique was used for general patients.

Result: It was observed that all the respondents have heard about TB at some point in their life and only 20% of the TB patients were aware about RNTCP. 52% patients got to know about TB from the Doctor.

KEYWORDS

Tuberculosis, RNTCP, Zoonosis

1. INTRODUCTION

Tuberculosis (TB) is a serious illness affecting tissues need to include lung, it is one of the oldest diseases and challenges in healthcare over 17,000 years, but it is curable and preventable. Unfortunately till this day people are suffering and dying by tuberculosis. The molecular evidence of tuberculosis was detected in fossil of an extinct bison, during the year of 1882 the Mycobacterium tuberculosis was discovered by Robert Koch; and for this discovery he received Nobel Prize during the year of 1905 in physiology or medicine. Tuberculosis will come under the top three killing disease in the world first is HIV/AIDS kills three million humans, TB kills nearly 2 million people each year, and Malaria kills one million people in each year, low middle income countries contribute 95% deaths. Mycobacterium tuberculosis is an important human pathogen, 1.9 million of people are dying per annum by this bacteria, globally more than 2 billion of people are getting affected by this mycobacterium tuberculosis bacteria, even though the tuberculosis bacteria is Identified 135 years ago also, a definite understanding of pathogenesis of tuberculosis is still deficient. In India 26.8% of the humans are affected by M. Bovin, it is an example of zoonosis which will transmit from cattle to human and human to cattle also. Humans are infected through the milk, milk products (reverse Zoonosis), other than M. Bovin there is another two group, which is M. Microti will not cause tuberculosis and M. Africanum is very rare. Totally 10.4 million new tuberculosis cases are found during the year of 2016 in worldwide and 64 percentage of the cases are from India, Indonesia, China, Philippines, Pakistan, Nigeria and South Africa. From the global perception the SEAR (South East Asian Region) is more important because it's a home for 25 percentage of world population, overall world level it has 30 percentage of poor population, this region is suffering from communicable and non-communicable. Because of HIV/AIDS pandemic resurgence of Tuberculosis: due to this, there is an increased number of mortality and morbidity in worldwide. Mumbai has the highest number of Tuberculosis patients in the world. Because of the slum population, lack of ventilation and overcrowded and unhygienic spaces, the city has become an easy target for constantly rising incidence of contagious diseases like tuberculosis. The number of patients suffering from drug resistant tuberculosis in the city increased by 21% (2015-16), shows the latest data from the BMC's public health department.

2. MATERIALS AND METHODS

A cross sectional quantitative study was conducted. The quantitative data was collected from the DOTS register maintained at the UPHC, which gave an insight about the number of TB patients, their age, sex, category of TB. For the purpose of getting data on the knowledge of general patients and treatment seeking behavior of TB patients. The total number of TB patients currently under UPHC CBD belapur (as of

March 15' 2018) were 44, out of which patients who were taking treatment for the past 6 months were taken to gain knowledge about their treatment seeking behavior (28 TB patients), With a 10.71% nonresponsive rate, a total of 25 TB patients were taken and a same proportion of general patients (25) visiting UPHC for seeking treatment for ailments other than TB were taken

A complete enumeration sampling technique was employed for collection of data from TB patients via household survey; simple random sampling technique was used for the purpose of collection of data from general patients. Randomization will help to eliminate the chance of bias.

The questionnaires for TB and general patients were designed separately to elicit information on respondents' knowledge, attitudes, beliefs and practices concerning TB disease, prevention, and control.

Data Analysis- Data was entered and analyzed by using MS-excel. Anonymity was assured by ensuring that only research personnel had access to the data. It is important to state that the data was not weighted during analysis.

Ethical consideration- Written informed consent was obtained from all participants after the study has been properly explained to them.

3. RESULTS

A total of 25 TB patients and 25 general patients were interviewed for the study during a 1 month period.

Knowledge of general patients

The survey aimed to understand the prevailing knowledge on TB. Tuberculosis is caused by Mycobacterium tuberculosis. TB is transmitted via air, when individuals with infectious Tuberculosis cough, sneeze, talk, or spit and, by so doing, expel TB bacilli into the air; thus, transmission is rampant in crowded and poorly ventilated habitats. It was observed that all the respondents have heard about TB at some point in their life. 24% patients got awareness about TB via TV, 24% through family/ friends/ relatives, 20% got to know about it through doctor, 12% through posters/ hoardings & only 4% through health education. 40% of them felt TB to be a very serious disease, 36% felt it is not at all serious & 24% felt it to be somewhat serious disease. 4% respondents were unaware of any mode of spread of TB, 4% thought it to be caused via pollution/ dieting, 20% felt it to be a droplet infection whereas 72% felt it to be caused by sharing items (towels utensils)

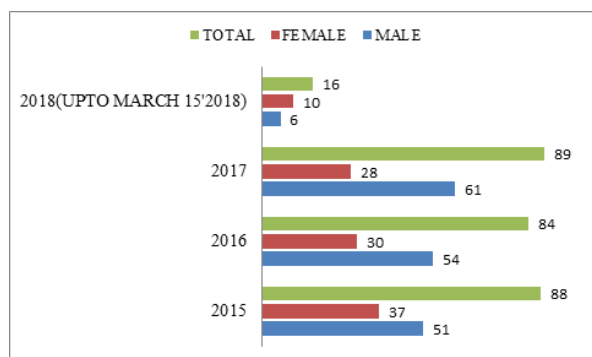
52% respondents felt it can affect anybody, 20% felt it to affect only poor people, 16% felt it affects both drug abusers and poor people, 12% felt it to be common among drug abusers

TABLE 1: Knowledge of TB among General patients (n=25)

Characters	Specified Characters	Number	Percentage	Total (n=25)
Awareness about RNTCP	YES	13	52	25
	NO	12	48	
Source of awareness	TV	6	24	25
	Family/Family/Relatives	6	24	
	Doctor	5	20	
	Posters/Hoardings	4	16	
	Health education(school)	4	16	
Seriousness of disease	Very serious	10	40	25
	Somewhat serious	6	24	
	Not at all serious	9	36	
Mode of spread of TB	Sharing items (utensils, towels etc.)	18	72	25
	Droplet infection	5	20	
	Others (Pollution, dieting etc.)	1	4	
	Don't know	1	4	
Who can be affected with TB?	Anybody	13	52	25
	Poor people	5	20	
	Drug abusers	3	12	
	Both poor people and drug abusers	4	16	

Socio- Demographic Profile of TB Patients

20% of respondents were from 11-20 years of age group. 60% respondents were from 21-30 years of age group. 12% respondents were from 31-40 years of age group. 8% respondents were from 40 above years of age group. Maximum number respondents are (60%) female, total respondents had TB. The percentage of male having TB were 40%. 32% of the respondents have completed their secondary level of education, 24% respondent had studied up to primary and 20% up to HSC, 12% respondent each were graduates and illiterate, 12% respondents were post graduates. 48% of the respondents were Hindu.32% respondents were Buddhist.12% respondents were Muslim and 8% respondents were Sikh. Majority of the respondents (84%) had pucca house. *5% left the job due to TB and were not working.*

FIGURE 1: Gender Wise Distribution of TB Cases

Source: TB Register at UPHC, CBD BELAPUR

Awareness Among TB Positive Patients

80% were having pulmonary TB and only 20% had extra pulmonary TB. Only 20% of all the patients were aware about RNTCP. 52% patients got to know about TB from the Doctor, 28% through health worker, 12% through TV and 8% via posters. 40% felt it to be a droplet infection whereas 60% felt it to be caused by sharing items (towels utensils)

72% respondents reported that they had no addictions. 20% respondents reported the addiction of smoking and tobacco and 8% respondents reported the addiction of alcohol.

FIGURE 2: Satisfactory Level of care

Treatment Seeking Behavior of TB Positive Patients

64% respondents visited government hospital at the first place.20% reported to the private clinic.8% respondents reported to private hospital and 4% each preferred treatment from others (local doctor etc.) and self- medication. 48% respondent faced discrimination in the form of isolation (58%), loss of work (25%) and separation from spouse (17%) whereas 52% faced no discrimination, 60% respondents reported cough during TB, 52% reported weight loss, 44% reported headache, 36% complained of loss of appetite 32% each reported fever and nausea, difficulty in breathing and other symptoms like malaise during TB. 20% reported chest pain during TB.,16% reported hemoptysis, 12% reported pain in abdomen and 4% reported pain in spine as the main symptoms.

40% respondents reported that covering mouth during sneezing and coughing prevents the TB.16% each respondents reported through good nutrition and by avoiding sharing of dishes and towels. 12% reported use of mask, 20% reported avoiding meeting others and 8% by resting at home, 24% reported they quit on addictions and 20% took no precautions. 32% respondents each reported that they had given information about the duration of treatment and precautions. 28% reported about the diet and regimen.8%reported about the spread of disease. 4% each reported about consequences and cause of disease.

56% respondents reported that the information about the disease and counseling provided only by TB-HIV. 28% respondents reported that the information about the disease and counseling provided by both the doctor and health worker.16% reported about the information given by only the Doctor.

4. DISCUSSION

As shown by the findings from this study, while 80% of the TB patients & 48% of general patients interviewed had never heard about RNTCP, a majority did not know anything about the symptoms and the causes of the disease. Only 40% of TB patients & 20% of general patients knew the exact cause of occurrence of TB (droplet infection). This shows that there is lack of knowledge with respect to TB among the general population. This statement was confirmed in a similar study conducted in Edo state, south-south region of Nigeria, by Tobin et al. Maximum non-TB patients(52%) felt that anybody can get TB similar to that of a study in two districts of punjab, pakistan . 48% of the respondents had to face discrimination showing that the disease is still stigmatised. TB information to the patients was being provided majorly by the health worker(56%) which was confirmed in a similar study carried out in ethiopia. Majority of the TB patients(40%) felt that covering mouth while sneezing can act as a precautionary measure to limit the spread of the disease which was also found in a study carried out in Ethiopia(66%). In case of majority of general patients TV (24%) and family/friends (24%) was found to be the major source for information regarding the disease which corresponds to a study carried out showing TV to contribute 15% of awareness among the general population. Discrimination due to stigma was higher among female patients in comparison to males which was consistent with the findings of another study carried out in Delhi. which can be substantiated by both cases of separation from spouse out of those discriminated being females and isolation(58%) was also adapted by majority of the patients so as to prevent the stigma related to revealing the disease which was also found in a study carried out in Rajasthan.

Cough was the main symptom observed in majority of TB patients(60%) which was similar in other studies. Majority of the TB patients seek treatment from government hospital(64%) which is in line with a study carried out in delhi in acommunity based survey.

5. CONCLUSION

The programme is doing pretty well as from the trend of three years, it can be observed that the number of TB patients had gone up due to increased awareness and the number of default and missed cases have gone down, however the programme would be more effective if private sector is involved by organizing more camps so as to create more awareness and confidence amongst the public. Also, if lab is operational in the UHP, patients can get the test done early rather than shuttling between facilities for different stages of diagnosis and treatment. Health education regarding TB should be imparted during schooling that will help to reduce the stigma about TB. A robust infection control mechanism should be in place and protective gears; mask should be given to those health workers who constantly come in contact with TB patients. A better recording system should be in place, rather than doing monthly entries on NIKCHAY portal, daily entries could be made Which will reduce the burden over TB-HV for filling multiple registers. Increased manpower for purpose of data entry and reporting and availability of a counselor for counseling TB patients as well as their family members will help to reduce the burden over TB-HV and help him to carry out his routine activities smoothly. Screening clinically and socially vulnerable risk groups for TB once a month will help in early diagnosis and treatment. Pilot incentives will help patients to be regular with the treatment 10% patients were not at all satisfied due to lack of proper information on mode of spread and precautions given to them, appointing a counselor will help to fill this lacunae.

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