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A STUDY TO ACCESS KNOWLEDGE ABOUT SPREAD OF TUBERCULOSIS AMONG THE PATIENTS ATTENDING OUTPATIENT DEPARTMENT IN A TERTIARY CARE HOSPITAL IN MARATHWADA REGION

Medicine

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ABSTRACT

INTRODUCTION : Worldwide every second a person is infected with tuberculosis (TB) and every 10 seconds someone dies as a consequence. According to the Global TB report the global TB burden India ranks 1st followed by Indonesia , and China. The one cause of this widespread is negligence of the patients and health workers towards the prevention and control of this disease.

METHODOLOGY : The study was conducted among all the patients attending the department of repiratory medicine who were willing to participate in the study. There were 200 people who were selected based on the inclusion and exclusion criteria to participate in the study as final sample size

RESULTS: There was poor knowledge about the cause of tuberculosis. There was poor knowledge about the spread of tuberculosis and disposal of the sputum. There was association seen between knowledge and age and education.

CONCLUSION: So by increasing health education and also by increasing the educational level we can increase awareness about spread of tuberculosis and achieve prevention.

KEYWORDS

INTRODUCTION

Tuberculosis (TB) constitutes a significant and major public health emergency globally. The 2015 World Global TB Report revealed that "TB still maintains the status of the world's biggest threats, due to the fact that, in 2014, the disease caused the death of 1.5 million people worldwide (1.1 million HIV-negative and 0.4 million HIV-positive)" [1]. Worldwide every second a person is infected with tuberculosis (TB) and every 10 seconds someone dies as a consequence. According to the Global TB report the global TB burden India ranks 1st followed by Indonesia , and China [1]

People have a general idea of what TB is and know that it is treatable. Gaps in knowledge, however, surround transmission, prevention, and the relationship between HIV/AIDS and TB. Such poor understanding is further augmented by erroneous beliefs.[2,3] his not only delays health-seeking behavior and, therefore, compromises the health of patients but it also presents ample time for the infection to spread to the healthy population.[4,5] The one cause of this widespread is negligence of the patients and health workers towards the prevention and control of this disease. Even though there are many organisations and programs that is conducted and funded by Government of India with a goal to eradicate TB has failed to educate its people. Hence , the study was done to access the knowledge of the patents coming with respiratory problem so that health education can be increased to bring awareness and prevent the disease.

METHODOLOGY

The study is a cross sectional study conducted at an outpatient department in a tertiary care hospital in Marathwada. The study was conducted among all the patients attending the department of respiratory medicine who were willing to participate in the study. There were 200 people who were selected based on the inclusion and exclusion criteria to participate in the study as final sample size .

Inclusion criteria included all those more than 18 years of age attending the respiratory outpatient department and willing to participate in the study. Exclusion criteria included patients not willing to participate in the study and age less than 18 years. Serious and hemodynamically unstable patients were excluded from the study. To reduce the bias the study excluded patients and family members of patients with on going tubercular therapy. The questionnaire consisted of 15 questions about the knowledge of tuberculosis and the spread of the disease and the patients who answered correctly for 7 questions were considered to have good knowledge and less than that were considered to have poor knowledge.

The knowledge about tuberculosis was accessed among the participants through a pretested semi-structured questionnaire. The study was conducted from January 2017 to Jan 2018. Data was analysed using Microsoft excel and SPSS version 16. Ethical clearance was obtained from institutional ethical committee. Consent was obtained from patients before obtaining the data.

MATERIALS

The materials used in this study included a questionnaire which consisted of 15 questions about the knowledge of tuberculosis and the spread of the disease.

RESULTS

The study had total 200 participants , among them 102 (51%) were males and 98 (49%) were females. The participants were majority from 40-49 years of age and the mean was found to be 45.23±11.3 years. Table no 1 shows age wise distribution of patients. There were 108 (54%) patients who were from rural area and 92 (46%) were from urban area. The education level showed 65 (32.5%) people were illiterate and 43 (21.5%) people had primary education and 40 (20%) people had secondary education and 36 (18%) people were 12th pass and 16 were graduates. Occupational profile showed majority 57 (28.5%) females were home makers. There were 77 (38.5%) who were farmer and 25 (12.5%) who were workers and 31(15.5%) who were teacher by occupation.

Table 1: Age wise distribution of study participants.

Age group	Number	Percentage
<29	22	11.0
30-39	37	18.5
40-49	76	38.0
50-59	42	21.0
>60	23	11.5
Total	100	100

The study asked for the cause of tuberculosis and the results showed that majority- 131(65.5%) didn't know the cause of tuberculosis as bacterial they thought it was familial and the occurrence of tuberculosis was a shock in the family. There were 156 (78%) who knew that the disease is contagious and spread from one person to another but there were only 43 (21.5%) who knew that it spread through the coughing/sputum of infected person. The correct method of sputum disposal was known only among 57 (28.5%) people, even though there were 140 (70%) who knew that sputum should not be discarded indiscriminately. (Table number 2,3, figure 1). The source of knowledge was also seen for and it was found that majority 137 (68.5%) found out through television about tuberculosis. There were 40(20%) who heard from a doctor and 20 (10%) from health worker and 3 (1.5%) from neighbours.

Table 2 : Knowledge of cause of tuberculosis among the participants.

Cause of tuberculosis	Number	Percentage
Bacteria	34	17.0
Virus	15	7.5
Parasite	20	10
Genetic	131	65.5
Total	200	100

Table 3 : knowledge about spread of disease among the participants.

Spread of disease	Number	Percentage
Yes	156	78.0
No	31	15.5
Don't know	13	6.5
Total	200	100

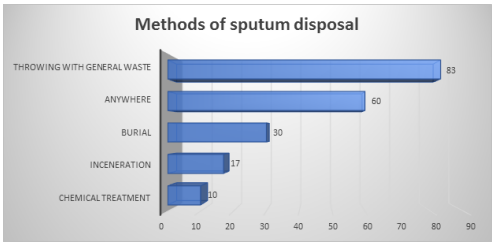

Figure 1 : Knowledge about disposal of sputum among the participants.

The study found association between knowledge and age, there was poor knowledge among all age groups but as age increased knowledge was still poor. In the study we did not find any association between gender and knowledge score.

Table 4: Association between age and knowledge score

Knowledge score	Good	Poor	P value =<0.001
Age in years			
<29	9	13	Chi value = 20.4
30-39	17	20	
40-49	14	62	
50-59	22	20	
>60	4	19	
Total	66	134	

Table 5: Association between sex and knowledge score

Knowledge score	Good	Poor	P value = 0.108
Sex			Chi value = 1.189
Males	39	63	
Females	27	71	
Total	66	134	

The association between knowledge and education showed significant association the level of knowledge was better in the literate group than the illiterate group.

Table 6: Association between education and knowledge score

Knowledge score	Good	Poor	Total	P value =<0.001
Education				Chi value = 26.44
Graduate	9	5	16	
12th pass	22	14	36	
Secondary	10	30	40	
Primary	13	30	43	
Illiterate	12	53	65	
Total	66	134	200	

DISCUSSION

In our study majority were males, similar findings were seen in a study by Deepu Changappa Cheriamane et al.[6] In a study by A. O. Hassan et al,[7] had higher female respondents than males who were 53%. The study by A. O. Hassan et al,[7] saw correlation between gender and knowledge where males had a greater knowledge but in the current study no association was found. The study by Deepu Changappa Cheriamane et al[6]. had similar findings with the current study age wise distribution. The study had 62% illiterates but the current study had only32.5% illiterates. In the study by Deepu Changappa Cheriamane et al[6]. had 18% who knew correct sputum disposal method in the current study the percentage was 28.5% which is higher.

In a study by A. O. Hassan et al,[7] they found knowledge about tb to be 26.5% in our study it was found to be 17% still lower than the study. Similar lower numbers were found in a study by Tobin et al.[8]

The study by Pieter Jacob Haasnoot, et al,[9] had 67% who had knowledge about tuberculosis. They found a positive correlation between education and knowledge which is similar to the current study. The study by Pieter Jacob Haasnoot, et al[9], there were 32% people who thought that tuberculosis was the punishment from god in the current study there were 65% participants who thought that it was genetic. The study by A. O. Hassan et al,[7] found association between education and knowledge similar to the current study.

CONCLUSION

In our study majority had poor knowledge of tuberculosis spread. There were few who knew how to dispose the sputum correctly even though majority knew that it was an contagious disease. The knowledge was sort by through television mostly. The study found association between knowledge score and age and education. So by increasing health education and also by increasing the educational level we can increase awareness about spread of tuberculosis and achieve prevention. The television must show basis points of prevention of spread too as people sort information from them which would cover a larger population. There are literature indicating that health education programs for TB are generally well received and improve TB control.[10,11,12] The key to success community mobilization and demand creation through public education on TB are a key factor[13]

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