Knowledge and Awareness of Tuberculosis among Patients Attending Out-Patient Department in a Tertiary Care Hospital.

Bindu T1, Sowmiya KR2, Nageswari AD3, Naveena M4

1Assistant Professor, Department of Respiratory Medicine, Tagore Medical College and Hospital, Rathinamangalam, Chennai.
2Associate Professor, Department of Community Medicine, Tagore Medical College and Hospital, Rathinamangalam, Chennai.
3Professor and Head, Department of respiratory medicine, Tagore Medical College and Hospital, Rathinamangalam, Chennai.
4JR, Department of Respiratory Medicine, Tagore Medical College and Hospital, Rathinamangalam, Chennai.

Received: March 2017
Accepted: April 2017

Copyright: © the author(s), publisher. Annals of International Medical and Dental Research (AIMDR) is an Official Publication of “Society for Health Care & Research Development”. It is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Tuberculosis, though being an age old infectious disease, India still finds it difficult to combat this infection due to lack of knowledge and awareness among general population. This disease still remains a social stigma and many patients try to conceal their illness from family, friends and relatives. Objectives: To assess the knowledge and awareness of tuberculosis among general patients attending outpatient department in a tertiary care hospital. Methods: A cross sectional study was conducted in a tertiary care hospital in patients >18yrs of age attending general outpatient department, after obtaining informed consent using a structured pretested standardized questionnaire. Sample size was 420 patients. Data entered in excel sheet and results given in percentage. Results: About 86.19% knew that India had high TB burden, 72.86% were aware of the infective etiology, 51.19% thought it affected all ages with a male preponderance (63.09%). 80.48% considered cough as most common symptom. Only 48.10% knew about DOTS centers, 40.95% of the free treatment available was realizable. 53.10% of the curvature of the disease and 55.48% about the fact that TB can lead to death. Conclusion: Though the awareness of symptoms, causative agent, mode of spread were reasonably good, knowledge on availability of DOTS centers, free treatment, curability and TB possibility leading to death is still poor among rural population.

Keywords: Tuberculosis, Knowledge, Awareness.

INTRODUCTION

TB is an age old infectious disease caused by Mycobacterium tuberculosis discovered in ancient centuries even in Egyptian mummies. It still remains a major public health problem in India despite the fact of the causative organism being diagnosed some 100 years back. The bacilli spreads through droplet infection by air and a single patient can infect 10 or more people per year.

Global/ burden in India

India ranks 17th among 22 high burden countries in terms of TB incidence rate.[1] The global annual incidence estimated is 9.4 million cases of which 1.98 million of them are from India contributing to about 1/5th of the global burden. 1.8 million new TB cases are diagnosed every year and about 0.8 million of them are smear positive cases. 4lakh death occurs from TB every year which corresponds to 2 deaths every 3 minutes. TB kills more adults in India than any other disease.[2]

This infectious disease particularly affects people of economically productive age group between 15-60yrs.[3] Predisposing factors include low socioeconomic status, overcrowding, homeless person, alcohol, immigrants from low risk to high risk areas, HIV, immune compromised patients, malignancy, on immuno suppressants, gastrectomy, silicosis, diabetes etc.

Name & Address of Corresponding Author

Dr. Bindu T.
Assistant Professor,
Department of Respiratory Medicine,
Tagore Medical College and Hospital,
Rathinamangalam, Chennai.

The national annual risk of TB(ARTI) was estimated as 1.5% i.e., 75 new smear positive PT cases are expected per 1lakh population annually. RNTCP needs to be revised with extra efforts being put on the development of effective strategies to target the socio-economic barriers in the care of TB patients.[4] The 12th five year plan of government of India in the national strategic plan (2012-2017) had revised the
objective of RNTCP in case detection to 90% and cure rate to 90% in new cases and 85% in retreatment cases. Lack of awareness among particularly in people living in rural areas is been a challenge impeding the progress towards TB control. ACNM- Advocacy, communication and social mobilization is needed to remove the social stigma among general public which had been recently stressed by WHO. The main reason for social stigma in India is lack of knowledge and awareness about the disease per se. Therefore to achieve the goal/ objective of RNTCP the need for creating awareness about etiology, symptoms, mode of spread and source of infection etc. is needed. With this background a study was conducted to assess the knowledge and awareness of TB among general patients attending Outpatient department in a tertiary care hospital.

MATERIALS AND METHODS

Study Centre
Tagore medical college and hospital.

Study design
Cross sectional study

Study period
1 month (1st January 2017- 31st January 2017)

Study population
General patients attending Outpatient department of a tertiary care hospital. All patients of age >18yrs attending general Outpatient department were interviewed with a predesigned standardized structured questionnaire after obtaining informed consent which was read out to patients in their local language. This questionnaire had two parts. Part 1 contained information about socio-demographic factors like age, sex, religion, residence, education, type of family and income whereas part 2 contained questions on awareness of TB like burden, cause, causative agent, vulnerable group, mode of spread, symptoms, diagnosis, curability, prevention, treatment etc.

Data analysis
Data entered in MS excel sheet and analysed by IBM SPSS version21.0. The results are given percentage.

RESULTS
Data collected from 420 patients were analysed. Majority of patients interviewed were between 16- 30 years (33.57%) followed by 31-45 Years (32.86%). Male participants were more compared to that of females (45.71%). Regarding religion Hindus were more (54.29%) compared to Muslims (16.90%) and Christians(9.52%). As per residence, majority belonged to rural community(87.62%) with an educational qualification of less than 12th standard(75.71%). 70.48% belonged to nuclear families. 

Table 1: Socio-demographic profile of patients (N=420).

<table>
<thead>
<tr>
<th>Characters</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Age</td>
<td></td>
</tr>
<tr>
<td>16-30</td>
<td>141(33.57%)</td>
</tr>
<tr>
<td>31-45</td>
<td>138(32.86%)</td>
</tr>
<tr>
<td>&gt;46-60</td>
<td>96(22.86%)</td>
</tr>
<tr>
<td>&gt;60</td>
<td>45(10.71%)</td>
</tr>
<tr>
<td>b) Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>228(54.29%)</td>
</tr>
<tr>
<td>Female</td>
<td>192(45.71%)</td>
</tr>
<tr>
<td>c) Religion</td>
<td></td>
</tr>
<tr>
<td>Hindu</td>
<td>262(62.38%)</td>
</tr>
<tr>
<td>Muslim</td>
<td>71(16.90%)</td>
</tr>
<tr>
<td>Christian</td>
<td>47(11.91%)</td>
</tr>
<tr>
<td>Others</td>
<td>40(9.72%)</td>
</tr>
<tr>
<td>d) Resident</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>368(87.62%)</td>
</tr>
<tr>
<td>Urban</td>
<td>52(12.38%)</td>
</tr>
<tr>
<td>e) Education</td>
<td></td>
</tr>
<tr>
<td>&lt;10th</td>
<td>102(24.29%)</td>
</tr>
<tr>
<td>&gt;10th</td>
<td>318(75.71%)</td>
</tr>
<tr>
<td>f) Type of family</td>
<td></td>
</tr>
<tr>
<td>Nuclear</td>
<td>296(70.48%)</td>
</tr>
<tr>
<td>Joint</td>
<td>124(29.52%)</td>
</tr>
<tr>
<td>g) Income</td>
<td></td>
</tr>
<tr>
<td>&lt;5000</td>
<td>188(44.76%)</td>
</tr>
<tr>
<td>5000-10000</td>
<td>122(29.06%)</td>
</tr>
<tr>
<td>&gt;10000</td>
<td>110(26.19%)</td>
</tr>
</tbody>
</table>
DISCUSSION

TB still remains a major public issue in India in spite of the effective implementation of RNTCP (Revised national tuberculosis control program) in 1998. Inadequate awareness and social stigma pertaining to this particular disease is a major hindrance factor in effectively controlling this infection.

A mass survey carried out by central TB division in 2007 reported poor level of awareness among general population[8]. Through this study we had analysed the knowledge and awareness of general patients attending Outpatient department about TB in a tertiary care centre.

A few population based studies conducted in various parts of India has also been highlighted for reference.

In our study 86.19% of the participants knew about the high burden of TB in India and 72.86% attributed infection as the cause of disease. One such study from Jaipur, Rajasthan showed that 90% of illiterates were unaware about etiology of TB. [9]

A similar study done by Sharma et al in Delhi showed 89% of study subjects also perceived it to be an infectious disease. However, Devey in Bihar showed that only 14% knew about TB as an infectious disease. [10] A study conducted in rural Delhi in 2006 showed very promising results where >95% of participants were aware of cause of TB. [11]

Regarding the vulnerable age group 51.19% believed that all age groups were affected, a finding similar to a study done by Sherkhane et al [12] About 2/3 of participants exhibited their source of knowledge of TB from family, friends and neighbours and only a minority 1/3rd from health personal/ mass media. This finding was quite similar in studies done in Ethiopia, Bihar and slums of Delhi.[10,13,14]

In our study, regarding the knowledge on common symptoms 80.48% answered cough as the most common symptom followed by fever and hemoptysis. A similar study done in Split, Croatia reported that 92% of participants were able to identify cough as principal symptom. [15] This great awareness on symptomatology could serve to help us in improving passive case finding. About 44.52% patients still believed that diagnosing TB was really difficult. In a large survey done in Orissa among patients of various clinics showed that they were aware of various aspects of diagnosis, prevention and control of TB. Majority of them also knew about DOTS centres. [16] contrary to our study where only 48.10% had heard about DOTS. A study done in Bengal revealed only 2% of general population in hospital knew about DOTS.[17]

Considering the curability of the disease only 53.10% thought that TB is curable. A similar study done in Serbia reported that 86% thought TB is curable and another study at Rajasthan said 90% were in view of TB being a curable disease.[18,19].
CONCLUSION

Though the awareness of symptoms, causative agent, mode of spread were reasonably good, knowledge on availability of DOTS centers, free treatment, curability and TB possibility leading to death is still poor among rural population. The need for imparting health education and awareness especially in rural communities through mass media/ health care personal is needed to progress towards TB free India.

Recommendations

Regular health educational activities through mass media/campaigning should be organized particularly in rural areas. Television shows and awareness programmes can be run at various places in hospitals so that basic information of TB could reach general patients. ACSM should be strengthened and given an equal role in RNTCP programme along with other objectives.

REFERENCES


Source of Support: Nil, Conflict of Interest: None declared