

Original Research Article

ASSESSMENT OF KNOWLEDGE, ATTITUDE AND SOCIAL PRACTICES TOWARDS TUBERCULOSIS FROM DIAGNOSED TUBERCULOSIS PATIENTS IN A TERTIARY CARE HOSPITAL OF WESTERN U.P.

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Received : 27/05/2025
Received in revised form : 14/07/2025
Accepted : 03/08/2025

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DOI:10.70034/ijmedph.2025.3.332

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

Int J Med Pub Health
2025; 15 (3); 1808-1811

ABSTRACT

Background: Despite the efforts like implementation of National Tuberculosis Elimination Programme (NTEP), free DOTS Therapy and free nutritional support for TB patients by government, India is still lacking a way behind in the strategy of WHO to eliminate TB till 2025. One of the real difficulties faced in TB control is timely diagnosis, consistency of patients for therapy, and person to person transmission rate which in turn is directly related to knowledge, attitude and social practices (KAP) of tuberculosis patient. So, this study was planned to assess KAP of tuberculosis patients before and after education, in order to reduce the drug resistance rate and mortality rate of tuberculosis among patients suffering from the disease at our tertiary care centre.

Materials and Methods: This was an observational prospective study in which KAP assessment was done by using questionnaire and interview for a period of 6 months from January 2019 to June 2019 in department of TB & Chest, TMMC & RC Moradabad.

Results: Total 162 patients were enrolled for study out of which 153 came after counselling and 9 left the study. Out of 153 patients 93 were males and 60 were females. Majority of patients were among age group of 19-64 years and were from rural areas. Pre counselling scores of knowledge, attitude and practices were very low compared to post counselling scores.

Conclusion: Assessment of KAP towards tuberculosis and increase in awareness through proper education and counselling proves to be a beneficial tool for control of tuberculosis. So, these efforts should be continued on a regular basis for each and every patient and also for general public so that a significant control in tuberculosis can be achieved.

Keywords: Tuberculosis, Respiratory Infection

INTRODUCTION

Tuberculosis has been known to humans since millennial. It was, and it is still, considered a dreadful disease to mankind and is a hindrance for country's social and economic development.^[1] Globally, India is stated to be the highest burdened country with tuberculosis, having 1/4th of global

incidence. More than 27% of the total population is infected and 1.25 million individuals died from TB in 2023. The real difficulties related with TB diagnosis and treatment achievement rate is patient's consistency for therapy and multidrug-resistant tuberculosis (MDR-TB).^[2] It is crucial to maintain a knowledge-based approach towards TB and to continue focusing on communities at risk and to guarantee powerful collaboration with associate

participants. As once stated by our honorable prime minister Mr. Narendra Damodar Modi, with his visionary approach India was set to be free by implementation of various strategy till the year 2025. But somehow we are way behind the target despite of continuous efforts. The current scenario emphasizes on the alarming and emergent need of innovative inventions to be taken seriously for effective control of tuberculosis. In a country like ours having a commendable poverty, inadequate use of mass media, the general population was not well educated about TB, leading to low understanding and awareness about the disease.^[3] Majority of population may not know the hazards due to drug — resistance TB. Compliance is an important factor because medicines need to be taken for several months. Medication adherence and compliance of the patient can be increased if patients are aware about the disease, treatment, preventive measures and non-compliance consequences to the health of the patients and to other people. Innovative communication would be an important strategy to generate awareness for tuberculosis control. Keeping this in mind, we planned a study to identify the knowledge, attitude and social practices (KAP) regarding various variables of tuberculosis among patients visiting tertiary care hospital and to assist them in improving their KAP, in order to reduce the drug resistance rate and mortality rate of tuberculosis.^[4,5]

MATERIALS AND METHODS

This was a prospective observational study in which assessment of knowledge, attitude and practice was done by using questionnaire and interview methods for a period of 6 months in department of TB and Chest. TMMC & RC Moradabad.

Source of data collection

Data of the patient was collected from the OPD of Pulmonary Medicine and DOTS Centre from investigation reports and another relevant source. Case reports of patients were analyzed. History of medication / treatment plan was also used for data collection. Questionnaires were filled by the patients and on the basis of grading in questionnaires patients were divided into groups. Interview with patients was done to measure the scale of knowledge.^[6,7]

Inclusion Criteria

- Patients diagnosed with tuberculosis and undergoing treatment.
- Patients having previous history of anti-tubercular therapy.

Exclusion Criteria

- Patients having symptoms like cough, fever, weight loss but not diagnosed with pulmonary or extra-pulmonary tuberculosis cases.

RESULTS

Total 162 patients were enrolled in this study, out of which 153 came after counselling and interview, 9 patients left the study. Out of 153 patients 93 were male and 60 were female (Table 1). Out of 153, 67.9% (104/153) were from rural area and 32% (49/153) were from urban area. (Table 2)

Table 1: Sex wise distribution of population

Distribution of patients	Total number of patients
Male	93 (60.78%)
Female	60 (39.21%)
Total	153 (100%)

Table 2: Residential distribution of population

Residential area	Total number of patients
Rural	104 (67.97%)
Urban	49 (32.02%)
Total	153 (100%)

Table 3: Shows change in knowledge of patients before and after counselling

Q. no	Questions	Before counselling	After counselling
1	Do you know about Tuberculosis disease?	47 (30%)	152 (99%)
2	Is Tuberculosis a treatable disease?	48 (31%)	146 (95%)
3	According to you can TB transmitted?	28 (18%)	124 (84%)
4	Is Tuberculosis an air borne disease?	56 (36%)	148 (97%)
5	Are bacteria or germ the main causative agent of Tuberculosis?	41 (26%)	114 (74%)
6	Are coughing, hemoptysis and chest pain major symptoms of Tuberculosis?	93 (60%)	147 (96%)
7	Is the most common symptom of tuberculosis is persistence of cough > 2 weeks?	91 (59%)	148 (96%)
8	Does stopping the treatment worsen the disease ?	56 (36%)	126 (82%)

Frequency of knowledge is increased after patient counselling. Before counselling frequency of knowledge is 30 to 60 percent but after counselling it is increased more than 80 percent.

Table 4: Shows change in attitude of patients before and after counselling

Q. No	Questions	Before Counseling	After Counseling
1	Are you ready for the treatment, when you diagnosed Tuberculosis?	97 (63%)	152 (99%)
2	Are you surprised when you diagnosed with tuberculosis?	35 (22%)	82 (53%)
3	Have you spoken to physician about Tuberculosis infection?	64 (41%)	146 (95%)
4	Have you discussed to family members and friends about Tuberculosis?	50 (32%)	146 (95%)
5	Do you feel compassionate and have desire to help people suffering from TB?	49 (28%)	135 (88%)
6	Does community support and help a person who has Tuberculosis?	44 (28%)	117 (79%)
7	According to you Tuberculosis is a serious concern?	80 (52%)	94 (61%)
8	Do you think Tuberculosis is a serious but curable disease?	47 (30%)	113 (73%)
9	Do you think Tuberculosis is dangerous and non-treatable?	79 (51%)	92 (60%)
10	Is your first choice of treatment being modern medication?	73 (47%)	152 (99%)

Table 5: Shows change in social practices of patients before and after counselling

Q. no.	Questions	Before counselling	After counselling
1	Do you shake hands with all the people in your routine?	41 (26%)	68 (44%)
2	Do you keep handkerchief or hand on your mouth when you cough?	60 (39%)	146 (95%)
3	Do you wash your hands with soap before eating food?	52 (33%)	144 (94%)
4	Will you go for regular checkups and lab tests for TB?	57 (37%)	147 (96%)
5	Are you following the lifestyle and diet modification regularly?	48 (31%)	147 (96%)

DISCUSSION

Implementation of National Tuberculosis Elimination Programme, DOTS therapy and nutritional support is available for patients having tuberculosis by government of India, but India is still lacking a way behind in the strategy of WHO to eliminate TB till 2035. Difficulties which are faced to control Tuberculosis is, diagnosis is not on time, patients are not consistent for therapy of tuberculosis, and person to person transmission rate is high, which is directly related to knowledge, attitude and social practices (KAP) of tuberculosis patient. Health education session on tuberculosis should be planned out according to the socio-demographic characteristics of the population with special focus on young age group, illiterate and poor people.^[8]

In our study the level of knowledge, attitude and practice was low i.e. 37%, 54% and 33% before counselling and this is increased up to 90%, 80% and 85% after counselling. Similar findings reported by Angeline G et al,^[9] in Tamil Nadu in a cross-sectional study i.e. Knowledge, attitude and practice level of 45%, 14% and 26% respectively. These findings highlight the need to improve the awareness about TB, by giving high emphasis on the symptoms, early diagnosis and full treatment for preventing and curing the disease. In the other study done by Esmael A et al,^[10] in Ethiopia the level of knowledge was very low and 45% patients were self-treated for tuberculosis due to economical and transport problem. Jani et al,^[11] from Northern Gujrat region reported that 45.0% caregivers of patients had knowledge regarding mode of spread of TB infection to others. 58.9% caregivers of patients knew about curability of the disease. 68.9% caregivers of patients had knowledge regarding DOTS (Directly Observed Treatment Short Course chemotherapy) centre for TB treatment under RNTCP (Revised National Tuberculosis Control Programme). 32.3% caregivers of the patients knew that TB can be prevented by BCG vaccine. In

another study which is done by Das P et al,^[12] from West Bengal conducted study on perception of tuberculosis among general patients of tertiary care hospitals Bengal,^[12] and reported that 91.38% respondents had heard about tuberculosis. 16.81% patients knew correctly about cause of tuberculosis and 31.4% knew about mode of spread. About 62% answered correctly that cough is the commonest symptoms. 82.76% knew about curability of the disease. 8.6% said isolation of patient and according to 6% avoidance of sharing of food were reported as preventive measures. A study based on survey of knowledge, attitude and practice done by Malngu N et al,^[13] in Botsabelo Hospital, Lesotho. They reported less than half i.e. 47.3% of respondents had good knowledge about MDR-TB which is quite high comparative to our study. Bhandari S et al,^[14] conducted study about knowledge, attitude and practice against tuberculosis infection control among medical students and nursing staff,^[14] where medical students showed statistically significant higher knowledge, attitude and practice when compared with nursing staff. So, they concluded that regular seminar, symposiums or meeting should be arranged to improve the knowledge about tuberculosis.

CONCLUSION

In this study we found that significant difference in tuberculosis control can be achieved through proper patient education and counselling. Assessment of KAP towards tuberculosis and increase in awareness through proper education and counselling proves to be a beneficial tool for control of tuberculosis. So, these efforts should be continued on a regular basis for each and every patient and also for general public so that a significant control in tuberculosis can be achieved.

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