

ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE ABOUT TUBERCULOSIS AND ITS TREATMENT IN INDIA

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ABSTRACT

Background: India is ranked first among the high-burden countries of TB and contributed 24% of the estimated global incident TB cases and about 20% of global TB-related deaths in 2013. Assessment of knowledge, attitude, and practice (KAP) of patients toward TB is very important for planning public health programs, problem identification, and planning intervention based on the findings. **Aims & Objectives:** To study the knowledge, attitude and practice regarding tuberculosis and its management in India. **Material and methods:** A cross sectional study was conducted among suspected and confirmed TB patients who were 18 years of age and older. 450 participants were

enrolled. A well structured questionnaire was used to collect data. **Results:** Out of 450 subjects 55.1% were male and 44.9 % were females. The most frequently reported symptoms were chronic cough 380 (84.4%), production of sputum 350 (77.8%). Incidence was found higher in illiterates (53.3 %) and rural dwellers (58.7 %). **Conclusion:** Majority of respondents had several misconceptions about TB. It is very essential to create proper awareness about its cause, transmission, prevention, and availability of public service.

KEYWORDS: Tuberculosis, knowledge, attitude, practice, cough.

INTRODUCTION

With a population of about 1252 million, India is the largest country in the region. It is ranked first among the high-burden countries and contributed 24% of the estimated global incident TB cases and about 20% of global TB-related deaths in 2013. Prevalence and incidence rates of all forms of tuberculosis were 211 and 171 respectively per 100 000 population in 2013. The notification rate of all forms of TB (new and relapse) and bacteriologically confirmed cases were 99 and 50 respectively per 100 000 population in 2013; the notification rate of all TB cases was 113. Despite efforts to increase detection of TB cases and achievements in terms of incidence and prevalence reduction, the case-detection rate of all forms of TB was estimated to be 58% in 2013.

The current focus of the Revised National Tuberculosis Control Programme (RNTCP) of Government of India uses Directly Observed Treatment Short Course (DOTS) to achieve and maintain a cure rate of over 85% and augmentation of case finding activities to detect at least 70% of estimated cases.^[1,2]

Studies showed that a low knowledge score was observed more among the illiterate, females, rural residences, low income, and youngest age group.^[3] Assessment of knowledge, attitude, and practice (KAP) of patients toward TB is very important for planning public health programs, problem identification, and planning intervention based on the findings.^[4,5] Therefore, the objective of this study is to assess patients' knowledge, attitude, and health-seeking practice towards tuberculosis.

MATERIAL AND METHODS

A cross-sectional descriptive study was conducted among suspected pulmonary TB cases at the out-patient department and retreatment cases at DOTS. A questionnaire was used that consisted of both closed- and open-ended questions. The questions on the questionnaires included information on the socio-demographic characteristics of the respondent, knowledge, attitudes, and health-seeking practice toward TB. Verbal consent was obtained from each respondent.

Statistical analysis: Data entry and analysis was done by a trained encoder using SPSS (Statistical Package for Social Science version 16).

Ethical clearance was taken before the commencement of the study.

RESULTS

A total of 450 (255 smear-positive and 195 smear-negative TB) respondents were enrolled in this study. Out of these 55.1% were male and 44.9 % were females. About 41.1% were urban dwellers while 58.7 % were rural dwellers.

Socio-demographic characteristics of smear positive and negative patients.

Variables	Number (%)
Age group (year)	
18–30 212 50.2	220 (48.9)
31–40 91 21.6	93 (20.7)
41–50 79 18.7	83 (18.4)
> 51 40 9.5	54 (12)
Sex	
Male	248 (55.1)
Female	202 (44.9)
Religion	
Hindu	275 (61.1)
Muslim	134 (29.8)
Christian	18 (4)
Sikh	23(5.1)
Education	
Literate	210 (46.7)
Illiterate	240 (53.3)
Residence	
Urban	186 (41.3)
Rural	264 (58.7)

Respondent's knowledge about general aspects of TB

Variables	Number (%)
Sign/symptom	
Cough	380 (84.4)
Cough > 2 weeks	180 (40)
Ongoing fatigue	120 (26.7)
Shortness of breath	132 (29.3)
Weight loss	164 (36.4)
Fever	102 (22.7)
Do not know	62 (13.8)
Mode of acquiring Tb	
Through air droplet	362 (80.4)
Through shaking hands	7 (1.5)
Through sharing dish	145 (32.2)
Do not know	72 (16)
Mode of prevention of Tb	
Covering mouth and nose	310 (68.9)
Avoiding sharing dish	140 (31.1)
Through good nutrition	240 (53.3)
Closing windows	190 (42.2)

The majority of patients came with a combination of symptoms. The most frequently reported symptoms were chronic cough 380 (84.4%), production of sputum 350 (77.8%), night sweat, fatigue/tiredness, shortness of breath, and unexplained weight loss. 55 (12.2%) had a contact history with known positive pulmonary tuberculosis (PTB) cases and 43 (9.5%) with suspected TB case.

Most study subjects 280 (62.2%) heard about TB from health professionals, whereas 180 (40.0%) from person to person communication, 310 (68.9%) from public radio, and 280 (62.2%) from television. Among respondents only 12.4% (56) tried to search information about TB and 87.5 % (394) feel that they were not well informed about TB.

Inhaled droplets through coughing and sneezing were recognized as the common source of TB infection that was recognized by 80.4%. The four most commonly recognized symptoms of TB mentioned by respondents were coughing (84.4%), weight loss, cough for 2 weeks and above , and shortness of breath.

From open-ended questions the majority of the respondents worried that the disease may be transmitted to their family. They also worried that the disease might not be curable and that society may stigmatize them. In addition, they felt sad because they cannot work properly.

DISCUSSION

Several studies explained that the majority of respondents heard about TB from radio, tv, health workers and personal experience for the first time.^[6,7] A majority of the respondents mentioned that TB is transmitted by respiratory droplets and can be prevented by covering the mouth and nose. Moreover, in this study a majority of respondents were deficient or unaware of different symptoms of TB. In this study a majority of respondents defined TB as a curable disease with modern therapy, whereas only half of the respondents were aware of the free charge of TB diagnosis and treatment. Several studies indicated that educational background, and residence of respondents was important determinants of TB knowledge.^[8,9] This study also found that a low level of knowledge score was significantly associated with illiterate and rural people. In this study, a delayed seeking behavior was also associated with a low knowledge score, experience self-treatment option, and delayed frequency of visits. In this study a delayed health-seeking practice was not associated with age, literacy status, residence, and sex. This might be a result of culture, low financial capacity, health perception, stigma, and socio-psychological beliefs.^[10] As a result, correct knowledge and

positive perception of the patient toward TB and its management is a prerequisite for them to seek early health care.

CONCLUSIONS

The majority of respondents had several misconceptions in all aspects of the most infectious form of TB. Cost and difficulties in transportation were mentioned as the main reasons for people to delay in seeking TB care. It would be better to establish an appropriate control measure such as establishing proper information, education, and a communication pathway that indicate the level of severity of the disease. In addition, creating proper awareness about its cause, transmission, prevention, and availability of public service are very essential.

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