# **Community Medicine**



# A STUDY ON AWARENESS AND HEALTH SEEKING BEHAVIOUR IN **RELATION TO TUBERCULOSIS (TB) AMONG ADULTS (> 18 YRS) IN URBAN SLUM POPULATION OF GUWAHATI CITY**

#### **Dr. Rohit Kumar** Post Graduate Trainee, Department of Community Medicine, Gauhati Medical College & Hospital, Guwahati \*Corresponding Author Sinha\* Dr.(Mrs) Mousumi Associate Professor, Department of Community Medicine, Gauhati Medical College &

Krishnatreya

Hospital, Guwahati

ABSTRACT BACKGROUND- India is the highest Tuberculosis (TB) burden country with WHO statistics for 2011 giving an estimated incidence of 2.2 million cases. In this scenario, a study on awareness about TB is important.

OBJECTIVE- To assess awareness and health seeking behaviour in relation to tuberculosis among adults (>18 yrs) in urban slum population of Guwahati city

METHODOLOGY- A Community based cross-sectional study was conducted from October 2017 to November 2017 in the urban slums of Guwahati city. A minimum sample size of 150 was calculated and sample size of 180 was taken.

RESULTS-Among all respondents, 67.7% knows that treatment of TB is free of cost and regarding perception, 24% want to keep them separately while 28.6% want them to be admitted in a hospital.

CONCLUSION- There is a need for awareness programs in order to educate people regarding prevention of transmission of TB and also regarding DOTS.

KEYWORDS : Awareness, Health seeking behaviour, Tuberculosis, Urban slum.

# **INTRODUCTION**

India accounts for about a one- fourth of the global TB burden. India is the country with the highest burden of both TB and MDR TB worldwide. An estimated 28 lakh cases and 4.5 lakh people died due to TB in 2016.1 Government of India is also committed to achieve zero TB deaths by 2025.2 Treatment & care of TB in India is provided in the public sector as well as through private sector health providers. It is believed that more than half of all TB patients are cared for in the private sector.

Reasons such as poor knowledge of TB, poor knowledge of services available through the national public program, the convenience of services in the private sector, a desire for confidentiality, a desire for personalized care influences people in India to seek care from the private sector.

The National Annual Risk of Tuberculosis Infection (ARTI) was estimated at 1.5% i.e. 75 new smear positive pulmonary TB cases are expected per lakh population. TB mainly affects people in their most productive years with adverse socio-economic consequences for the household. Poor living conditions, debility and malnutrition predisposes population to TB. It is even more common among the poorest and marginalized section of the community.<sup>4</sup> Deaths due to Tuberculosis exceed the combined deaths due to all other communicable disease and account for 26% of all avoidable deaths in adults 5

The present study is undertaken with the objective of to assess awareness and health seeking behaviour in relation to tuberculosis among adults ( $\geq$  18 yrs) in urban slum population of Guwahati city.

# **OBJECTIVE**

To assess awareness and health seeking behaviour in relation to tuberculosis among adults (> 18 yrs) in urban slum population of Guwahati city.

# METHODOLOGY

A community based cross-sectional study was carried out in urban slums of Guwahati city from 1st October, 2017 to 30th November, 2017 among adult population ( $\geq$ 18 years) both male and female.

Taking the prevalence of awareness regarding mode of transmission of TB to be 71.8% from previous study<sup>6</sup>, allowable relative error to be 10% and alpha error to be 5%, minimum sample size was calculated to be 151. Thus a sample size of 180 was taken since 30 respondents from 6 slums were taken.

The following steps were involved in the selection of subjects:

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- Out of 99 slums in Guwahati city (slum survey report, 2009 GMC) 1) 6 slums were selected by simple random sampling.
- 2) From each slum 30 households were selected by systematic random sampling.
- From each household one eldest adult respondent was 3) interviewed. If no adult was present at the time of visit, adjacent household was visited.

Inclusion Criteria- All households residing in above mentioned areas (>6months) were included in the study. One adult respondent preferably the head of the family was chosen for the interview from each household. Exclusion Criteria- Adults who were not willing to participate.

House to house visits were conducted and data was collected by interview as well as observational method. Pre-tested, pre-designed Proforma containing both open ended and close ended questions was used.

Data analysis - The data obtained was analysed statistically and has been represented by simple table and bar diagrams. Informed consent was taken from each study participant.

#### RESULTS

Out of all respondents, 33.8% and 22.8% of respondents belonged to 18-28 years and 28-38 years of age group respectively and rest fell into higher age groups. Regarding educational status, 23.3% were illiterate and 22.2% had primary education while rest of respondents had educational status higher than primary school education. Most number of respondents belonged to class IV, i.e. 46.7% and class III, i.e. 30.6% socio-economic status (Based on modified B.G Prasad scale, April, 2016).

Among 180 respondents, 167 (92.8%) respondents had heard about TB while rest had not heard about TB. Table 1 shows the distribution of respondents based on their knowledge about symptoms of tuberculosis. Figure 1 shows that 44.4% respondents believe food and utensils to be the mode of transmission of TB while 39.4% believe physical contact to be the mode of transmission.

In the present study it was observed that 77.8% respondents believe that TB is curable. In this study we found out that 52.7% respondents have heard of DOTS and 67.7% respondents knew that TB treatment is free of cost. When asked about whether TB can be transmitted from person to person, 67% believed that TB can be transmitted from person to person, 19.2% believed that it is not transmitted and 13.8% told that that they don't know.

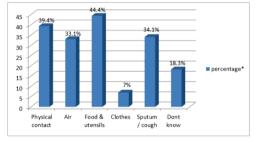
Table 2 shows distribution of respondents according to preference of action on getting symptoms of TB in which we can see that 74.9% respondents told that they will visit a doctor on getting symptoms of TB. Figure 2 shows the distribution of respondents about the perception of TB in the community in which we see can that 40.1% respondents were in the view that TB patients should be kept separately.

### Table1. Distribution of respondents based on their knowledge about symptoms of tuberculosis

Symptoms of tuberculosis	No. of respondents*	Percentage
Chronic cough	104	57.8
Coughing out blood	35	19.4
Weight loss	33	18.3
Fever	64	35.6
Others	9	5
Don't Know	14	7.8

\*Multiple response

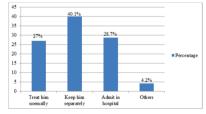
#### Fig1.Distribution of respondents based on their knowledge about mode of transmission of Tuberculosis



# Table 2. Distribution of respondents according to preference of action on getting symptoms of TB

Type of action	Number of respondents	Percentage (n=167)
Home remedy	4	2.4
Indigenous treatment	6	3.6
Visit a doctor	125	74.9
Over the counter drug	20	12
Bed rest	11	6.6
No action	1	0.5
Total	167	100

Fig2. Distribution of respondents about the perception of TB in the community



#### DISCUSSION

One of the goals of national health policy 2002 was to increase the awareness of Tuberculosis in both educated & uneducated people. In collaboration with WHO, Government of India established the National TB Institute (NTI) in Bangalore in 1959 to develop a national TB control programme (NTP), with the aim of establishing prompt awareness, diagnosis and ambulatory treatment. Awareness about the disease, its diagnosis, and treatment among public will help in controlling the killer disease.

In the present study, 92.8% respondents had heard about TB and 57.8% knew that cough is a symptom of TB while 19.4% believed that cough with bleeding is a symptom of TB. A study by Chinnakali, et al showed a total of 94% respondents had heard about TB, 82% were aware that cough is a symptom of TB, followed by weight loss (28%), blood in sputum (18%), and fever (14%).8

In the present study, 44.4% respondents believe food and utensils to be

the mode of transmission of TB, 39.4% believe physical contact to be the mode of transmission while only 34.1% respondents believed cough to be mode of transmission of TB In another study by Sharma et al, 71.8% respondents believed cough to be mode of transmission of TB<sup>6</sup>

In the present study it was observed that 77.8% respondents believe that TB is curable. In this study we found out that 52.7% respondents have heard of DOTS and 67.7% respondents knew that TB treatment is free of cost. According to the study by Sharma et al, about 97% of the respondents indicated that TB is curable and 90.0% knew that free treatment was available through the national programme.

In the present study 67% believed that TB can be transmitted from person to person, 19.2% believed that it is not transmitted and 13.8% told that that they don't know while in the study by Chinnakali, et al 81% stated that TB can spread from one person to another and 11% were of opinion that TB will not spread.8

#### CONCLUSION

It was found that maximum number of respondents were illiterate .They had poor level of knowledge about causes, symptoms and transmission of TB. The knowledge about prevention of transmission of TB was also very poor. The study revealed that majority of slum dwellers would prefer to go to a doctor if they get symptoms of TB. There is a need to educate the people regarding the modes of transmission of TB and regarding common interventions useful in the prevention of transmission of TB. There is also a need to create awareness among the people regarding DOTS.

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