

## Attitude and Practice of Pulmonary Tuberculosis Patient in Urban Settings in Bangladesh

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### Abstract

**Background:** Pulmonary tuberculosis is a very common disease in both urban and rural settings among the Bangladeshi people. **Objective:** The purpose of the present study was to assess the attitude and practice of pulmonary tuberculosis patient in urban settings of Sylhet District of Bangladesh. **Methodology:** This cross sectional study was conducted in the DOTs corner of Sylhet MAG Osmani Medical College, Sylhet, Bangladesh and Sylhet Chest Disease Hospital, Sylhet, Bangladesh during the period from June 2011 to November 2011 for a period of six (6) months. All the patients who were diagnosed as case of pulmonary tuberculosis and were treated with anti-tubercular drugs at DOTs corner who attended in the both Hospitals, Sylhet were selected as study population. **Result:** A total number of 194 pulmonary tuberculosis patients were recruited for this study. Among the 194 patients, 36(18.6%) patients had good attitudes and practices and 158(81.4%) patients had poor attitudes and practices. **Conclusion:** In conclusion, majority of the pulmonary tuberculosis patients under DOTs living in the urban area of Sylhet have poor level of attitude and practices. [Journal of National Institute of Neurosciences Bangladesh, 2018;4(2): 97-100]

**Keywords:** Attitude; Practice; Pulmonary Tuberculosis; DOTs therapy; KAP study

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### Introduction

Tuberculosis (TB) is a treatable disease<sup>1</sup>. It has been eliminated in some countries, while devastating the populations of others<sup>2</sup>. Perhaps the greatest challenge in the control of this ancient and global threat is the lack of accessible modern intervention methods. The WHO Stop TB Partnership recognizes many facets of disease control like vaccination, case finding, treatment and patient compliance<sup>3</sup>. The program functions by passive case-finding and upon diagnosis patients are placed in the DOTs program which works toward better treatment outcomes by monitoring patient compliance. The DOTs program is inexpensive and has been very

successful in ensuring positive treatment outcomes once a diagnosis is made<sup>4</sup>.

Tuberculosis claims over two million lives and causes an economic drain of over three billion rupees a year in India<sup>5</sup>. The success rates of properly applied DOTs (directly observed treatment, short course) exceeds 80.0 to 85.0% in most countries of south east Asia; however, the primary obstacle to complete control over the spread and incidence of the disease is poor case finding, which still remains much less than 70.0% in some south east Asian countries such as India<sup>6</sup>. Extensive search on attitude and practice about tuberculosis in north eastern part of Bangladesh also done, and results indicate that

without a health education programme, levels of knowledge about the cause and treatability of the diseases are poor<sup>7</sup>. Therefore this present study was undertaken to assess the attitude and practice of pulmonary tuberculosis patient in urban settings of Sylhet District of Bangladesh.

### Methodology

This was a prospective cross sectional study. The study place was the Department of Medicine of MAG Osmani Medical College Hospital, Sylhet. The study duration was six months from February 2011 to November 2011 for a period one (01) year. Patients who are smear positive pulmonary Tuberculosis attended for sputum examination in DOT's centre of MAG Osmani Medical College Hospital, Sylhet and Sylhet Chest Disease Hospital within inclusion criteria are my study population. Sputum smears positive patients receiving TB treatment under DOTS program for more than 4 weeks with the age group of more than 18 years Consecutive smear positive cases sampling method was used to select 194 patients with smear TB positive findings. Data was collected from the patient who was attending the DOTs corner of MAG Osmani Medical College Hospital, Sylhet and Sylhet chest disease hospital for collecting anti tubercular drugs. Data were processed manually and analyzed with the help of SPSS (Statistical package for social sciences) 17.0 Version. Qualitative data were analyzed as percentage and proportion. Comparison carried out between two groups done by Chi-square test. A probability value (p) of <0.05 was considered statistically significant.

### Results

Most of the patients 97(50.0%) were in the age between 31 to 45 years, 55(28.4%) patients were in the age above 45 years and 42(21.6%) patients were in the age of up to 30 years (Figure 1).

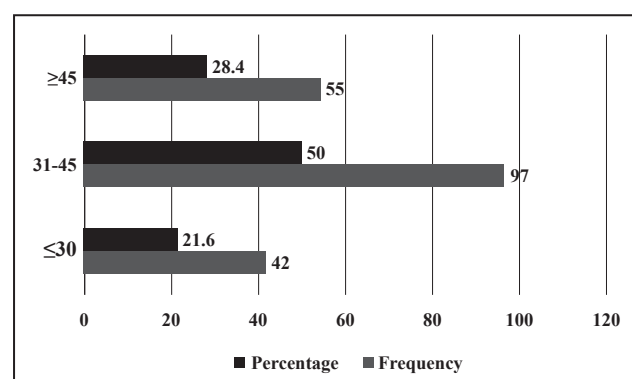


Figure 1: Distribution of the patients by age group (n=194)

More than two-third of the patients [133(68.6%)] reported that they had got consultation before their diagnosis of tuberculosis. Among the patients of previous non-consultation of their disease majority 54(88.5%) had got self-medication; 4(6.6%) patients due to economic problem and 3(4.9%) due to feeling of better. Among the 133 patients, 57(42.9%) patients consulted at hospital, 30(22.6%) at family doctor, 25(18.8%) at specialist doctor, 17(12.8%) at local health centre and 4(3.0%) at traditional healer. Nearly two-third of the patients 121(62.4%) reported that they had a tendency to hide their disease. Most of the patients 138(71.1%) knew that consequence of not taking treatment was death, transmission to others 137(19.1%) and complication of the disease 19(9.8%). Among the 194 patients, 36(18.6%) patients had good attitudes and practices; and 158(81.4%) patients had poor attitudes and practices (Table 1).

Table 1: Attitude & Practice of Pulmonary Tuberculosis among patients under DOTS (n=194)

Attitude & Practice of Patients	Frequency	Percent
Previous Consultation of Their Disease	133	68.6
Self-medication causes of previous non-consultation	54	88.5
Consultation at Hospital	57	42.9
Hiding Tendency of Their Disease	121	62.4
Death due to avoid Medication	138	71.1
Poor attitudes and practices	158	81.4

Table 2: Association of different variables and attitudes and practices

Variables	Good Knowledge (n=90)	Poor knowledge (n=104)	P Value
<b>Age group</b>			
≤30 years	10(23.8%)	32 (76.2%)	
31-45years	20(20.6%)	77(79.4%)	*p<0.05
≥45 years	6(10.9%)	49(89.1%)	
<b>Sex</b>			
Male	28(21.9%)	100(78.1%)	*p<0.05
Female	8(12.1%)	43(65.2%)	
<b>Residence</b>			
Rural	8(9.1%)	80(90.9%)	*p<0.01
Urban	28(26.4%)	78(73.6%)	
<b>Education</b>			
Primary & below	8(5.3%)	143(94.7%)	*p<0.01
Secondary & above	28(65.1%)	15(34.9%)	

Attitudes and practices was significantly different between residential status ( $p < 0.01$ ) and educational level ( $p < 0.01$ ); but no different between age group ( $p > 0.05$ ) and sex ( $p > 0.05$ ) (Table 2).

### Discussion

In this study among 194 patients, 90 (46.4%) patients had good knowledge and 104 (53.6%) patients had poor knowledge about tuberculosis. Among the 194 patients, 36 (18.6%) patients had good attitudes and practices; and 158 (81.4%) patients had poor attitudes and practices. Most of the patients were aware that TB is a highly infectious but curable disease. Despite this fact, a significant number still would not disclose if they were inflicted with the disease for fear of being excommunicated and left out.

The relatively poor outcome based on the knowledge, attitudes and practices among the TB patients showed that there is a need to implement activities that would educate the public about the disease. These activities should put emphasis on the seriousness of the disease, the modes of transmission, the sequel of treatment interruption and the curability of TB<sup>8</sup>. Based on this survey, the media, as well as, personal experience were successful means of disseminating information about TB. This survey also found that consults were sought mainly in the hospital and the local health centers. These were promising venues for better detection of TB cases predicting better therapeutic outcomes for patients. This finding also indicated the need to strengthen health education activities through mass media and to foster collaboration between hospitals, local health center and the National TB program<sup>9-12</sup>.

The patients were aware of the different symptoms associated with TB. Despite this, the health-seeking behaviors of the patients were not commensurate to their knowledge about the disease. As seen in other studies, knowledge was not the only factor that affected patient's health-seeking behavior or adherence to treatment, but also attitudes and practices plays a vital role<sup>13-15</sup>. This study found that attitudes and practices were important; these played significant roles in the adherence to anti-TB treatment, thus, in the prevention of complications and progression of the disease. A number of factors also affected the attitudes and practices of these people, such as the stigma of the disease, their financial capacity, and health perception. In a study assessing gender perspectives in TB-related attitudes and practices in Sindh Province, Pakistan, knowledge on TB was generally poor, especially, among rural women who were not allowed to freely

visit health facilities unaccompanied<sup>8</sup>. Social isolation and rejection, as well as, misconceptions on TB transmission, contributed to the idea that TB is a disease to be feared<sup>16</sup>. TB was considered a death penalty by most females, whereas others considered it dangerous but curable. In a study done in Cambodia, the delay in seeking TB treatment was explored<sup>17</sup>.

A study done in Central Tanzania, on the attitudes and practices with regards to TB and its treatment showed that TB was an important health problem<sup>18</sup>. However, knowledge of the community on its cause was poor. This was likely the cause of delay in seeking treatment. It was also found out that poor knowledge of the tuberculosis patients were mainly due to lack of economic resources and lack of Education. The DOTS program for TB is playing a crucial role but extending the program to more may contribute to better therapeutic outcomes<sup>19-20</sup>. Thus preventing emergence of acquired resistance.

The study is conducted in urban setting of Sylhet district which may not reflect real scenario of this country. The sample size was small.

### Conclusion

In conclusion, greater efforts need to be undertaken to improve TB control among TB patients through appropriate and sustainable health education. A multi centre study should be conducted in other part of Bangladesh involving large sample size to compare knowledge, attitude and practice (KAP) of TB patients in this country.

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