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### **Original Article**

## Knowledge, Attitude towards tuberculosis among the attendants accompanying the patients visiting various Health centres of Block Hazratbal of District Srinagar of Kashmir Valley: A Cross Sectional Study

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#### Abstract

**Background:** Tuberculosis (TB) is as old as mankind. In 2015, there were an estimated 10.4 million new (incident) TB cases worldwide. Despite progress and millions of lives saved, global actions and investments fall far short of those needed. There are studies which have documented a positive association between TB knowledge and care seeking and treatment adherence and hence the control of tuberculosis.

**Material & Methods:** A cross sectional study was conducted among the attendants of the general patients attending the routine Out Patient Clinics of Block Hazratbal area of Kashmir. All the attendants accompanying the patients who were willing to participate in the study were interviewed by the investigator by a pre tested questionnaire.

**Results:** Only 37.8% knew that TB is caused by germs and just 15% knew about mode of transmission. Around 60% of respondents were aware of the signs and symptoms of Tuberculosis. Around  $2/3^{rd}$  of the respondents have heard about TB treatment but only  $1/5^{th}$  have heard about the programme. The major source of the knowledge regarding tuberculosis was Media (44.2%), followed by newspaper and relatives. The attitude of the respondents towards tuberculosis was very indifferent with 80% of them feeling that a case of tuberculosis should be isolated, stay away from social gatherings and quit the job.

**Conclusion:** The study revealed that there are gaps in the level of knowledge regarding TB among the respondents interviewed. The tendency to discriminate the patient was evident from the findings of this study. A lot needs to be done in increasing the awareness and knowledge of people about TB and thus stigma associated with TB can be allayed.

Key Words: Knowledge, Assessment, attitude, stigma, Srinagar, Kashmir.

#### Introduction

Tuberculosis (TB) is as old as mankind. In 2015, there were an estimated 10.4 million new (incident) TB cases worldwide, of which 5.9 million were men, 3.5 million were women and 1 million were children.<sup>1</sup> Over 95% of TB deaths occur in low- and middle-income countries. Six

countries account for 60% of the total, with India leading the count.<sup>2</sup>The programme to control the tuberculosis is in place since 1960s but it is still a major public health problem in India. Despite progress and millions of lives saved, global actions and investments fall far short of those needed.<sup>1</sup> Raising community awareness

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contributes for early diagnosis of TB is one of the pillars of the End TB Strategy <sup>3</sup>. There are studies which have documented a positive association between TB knowledge and care seeking and treatment adherence <sup>4,5,6</sup>. Therefore, this study was done to assess the knowledge and attitude regarding tuberculosis among the general public of Block Hazratbal of District Srinagar.

#### **Material and Methods**

A cross sectional study was conducted among the attendants of the general patients attending the routine Out Patient Clinics of Block Hazratbal area of Kashmir. Block Hazratbal is an Urban field practice area of Department of Community Medicine, Government Medical college, Srinagar. The area is divided into four zones: Zone Harwan, Zone Nishat, Zone Tailbal and Zone Hazratbal with a total population of 72000. Each zone has a cadre of healthcare services ranging from subcentres. Primary Health centres and Community Health centres with Jawahar Lal Nehru Memorial hospital being the first referral unit of the area. The current study was conducted in 3 zones only- Zone Harwan, Zone Nishat and Zone Hazratbal. An informed consent was taken from all the participants. All the attendants accompanying the patients who were willing to participate in the study were interviewed by the investigator by a pre tested questionnaire. Any individual who refused to participate was excluded from the study.

#### Results

A total of 500 interviews were conducted.

 Table no. 1: Socio Demographic characteristics

 of the Subjects interviewed:

Socio Demographic characteristics		N (%)
Age	19-24	39 (7.8)
	25-30	78 (15.6)
	31-36	167 (33.4)
	37-42	178 (35.6)
	>42	38 (7.6)
Sex	Male	274 (54.8)
	Female	226 (45.2)
Marital Status	Married	363 (72.6)
	Single	137 (27.4)

Education	Illiterate	231 (46.2)	
Qualification	Matriculation	145 (29)	
	Higher Secondary	94 (18.8)	
	Grauate and above	30 (6.0)	
Occupation	Professionals	7 (1.4)	
-	Teacher	17 (3.4)	
	Govt Employ	33 (6.6)	
	Private job	28 (5.6)	
	Home maker	212 (42.4)	
	Laborer	87 (17.4)	
	Others	116 (23.2)	

Table 1 revealed that around 70% of the interviewed subjects were belonging to age group of 31-42 years, with an almost 1: 1 male- female ratio. Around 50 % of the subjects were illiterate with home maker (42.4%) being the predominant occupation.

Table no. 2: Distribution of subjects according to
their knowledge about Tuberculosis:

then knowledge about 1 u			
Awareness regarding	Male	Female	Total
Tuberculosis:			N(%)
1.Caused by germ	121	68	189
			(37.8)
2.Communicable disease	212	141	353
			(70.6)
3.Mode of Transmission			
1. Coughing/sneezing	37	28	65 (13)
2. Blood transfusion	11	4	15 (3.0)
3. Through Food	17	4	21 (4.2)
4.Signs and symptoms			
1.Haemoptysis	177	113	290 (58)
2. Cough	172	153	325 (65)
3.Fever	168	167	335 (67)
4. Weight loss	129	156	285 (57)
5.Is preventable	156	37	193
			(38.6)
6. Methods of Prevention			
Avoid smoking	111	44	155 (31)
Avoid people who have TB	131	44	175 (35)
Avoiding cough in front of	177	34	211
people			(42.2)
7. Knows about vaccine	91	51	142
			(28.4)
8.Knows about Diagnosis			
Sputum testing	97	38	135 (27)
Blood tests	197	139	336
Chest X Ray	153	198	(67.2)
			351
			(70.2)
10.Is curable	211	134	345 (69)
11.Heard about	89	24	113
RNTCP/DOTS			(22.6)
12.Heard about TB treatment	197	124	321
			(64.2)
13.Treatment is free of cost	157	47	204
			(40.8)

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Table no. 3: Distribution of attitude towards TB	
among the subjects interviewed	

Attitude Towards TB	Male	Female	Total
			n(%)
Others should think less of	217	160	377
him			(75.4)
Should be	196	147	343
ashamed/embarrassed			(68.6)
Having TB is disgraceful	245	166	411
			(82.2)
Isolated from the family	277	124	401
			(80.2)
Avoid Marriage	178	155	333
			(66.6)
Should stay away from a	220	196	416
social gatherings			(83.2)
Should not disclose his	173	140	313
disease status			(62.6)
Should avoid sharing food/	276	145	421
clothes/utensils			(84.2)
Should quit the job	201	188	389
_			(77.8)

**Table no. 4:** Distribution of the subjectsinterviewed according to the source of knowledgeof tuberculosis:

Source of knowledge	Male	Female	Total
			n(%)
1. Media: Radio/TV	156	65	221 (44.2)
2. Newspaper	65	17	82 (16.4)
3. Magazines/books	21	13	34 (6.8)
4.Neighbours	19	11	30 (6)
5. Relatives.	15	4	19 (18.8)
6. Others <sup>*</sup>	3	1	4 (0.8)

\* Doctor, Health worker.

Regarding the knowledge about tuberculosis, only 37.8% knew that TB is caused by germs and just 15% knew about mode of transmission. Around 60% of respondents were aware of the signs and symptoms of Tuberculosis. Around 2/3<sup>rd</sup> of the respondents have heard about TB treatment but only 1/5<sup>th</sup> have heard about the programme. The major source of the knowledge regarding tuberculosis was Media (44.2%), followed by newspaper and relatives. The attitude of the respondents towards tuberculosis was very indifferent with 80% of them feeling that a case of tuberculosis should be isolated, stay away from social gatherings and quit the job.

#### Discussion

This study revealed that there are gaps in the level of knowledge regarding TB among the

respondents interviewed. Although the sample of the population interviewed does not represent the community as such, but a general idea of knowledge, beliefs, Attitude towards TB is revealed. Only 40% of respondents knew that TB is caused by a germ. Similar findings were reported by other investigators.<sup>7,8,9,10,11,14</sup> Some studies were in contrast with our findings.<sup>12,13</sup> More than  $2/3^{rd}$  of the respondents knew that TB is a communicable disease but only 15% of them knew about its transmission. Similar findings were reported by other authors.<sup>7,12,15</sup> However higher knowledge regarding the modes of transmission was reported by Mengistu Legesse et al and others.<sup>11,16,17,18</sup> Around 2/3<sup>rd</sup> of the respondents were aware about the signs and symptoms of TB which was in sink with the findings of other studies.<sup>7,10,12,14,15,16</sup> Only 38% knew that TB is preventable Disease and less than 50% of them knew about the methods of prevention. Around  $2/3^{rd}$  of respondents have heard about the treatment and knowing is were TΒ curable.<sup>7,10,12,19,20</sup> around 70% of respondents knew about diagnosis but some had some misconceptions as well. The source of this knowledge was predominantly Media (television, radio), Newspapers.<sup>21, 22</sup>

The study revealed indifferent attitude of respondents towards tuberculosis. 75% of respondents were of the opinion that people should think less of those having TB and it is disgraceful to have tuberculosis. Around 4/5<sup>th</sup> of the respondents reported that TB patients should be isolated and barred from attending social gatherings. The tendency to discriminate the patient was evident from the findings of this study (66% and 77%) having the opinion that TB patient should avoid marriage and quit the job. The stigma associated with the dreaded nature of the disease is leading to undesirable behaviour towards patients of TB. This indifferent attitude and stigma towards TB has been reported by other investigators.<sup>11, 12, 17, 18, 23, 24</sup>

The perception of tuberculosis as a stigma is still prevalent in our setting as revealed by the findings

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of the study. Much needs to be done to dispel the stigma associated with Tuberculosis as social factors play an important role in the management of TB patients. The stigma associated with the disease often leads to seeking delayed treatment. A lot needs to be done in fighting the battle against TB.

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