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Resident Doctors' Attitudes Towards Tuberculosis Patients

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Abstract

Background—The attitude of the resident doctors towards TB patients can affect their treatment seeking behavior, compliance to treatment as well as reinforce the stigma attached to the disease by the society at large.

Aims—To assess the attitudes of resident medical doctors towards tuberculosis (TB) patients.

Material and Methods—A cross sectional study was conducted among postgraduate resident medical doctors at B.J. Government Medical College and Sassoon General Hospital, Pune in September 2014. The background characteristics and attitudes were assessed using a semi-structured questionnaire. The responses were analyzed using chi square/fishers exact test and calculating odds ratio.

Results—Of the 212 resident doctors who responded to the question on attitudes, 132 (62%) see TB patients on a daily basis, 40 (19%) of the resident doctors had attended a training program on TB, and 99 (47%) respondents knew of a colleague with TB. Only 104 (49%) of the residents

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reported feeling compassion for and the desire to help TB patients. The residents who had attended a training program in TB were three times more likely to report compassion and a desire to help TB patients than those who had not undergone such training [28/40 vs 76/172; $p = 0.005$; OR = 2.95, 95% CI (1.33–6.61)]. Compared to residents who did not know of a colleague with TB, residents who knew of a colleague with TB were nearly three times more likely to avoid managing TB patients or fear them and think they may cause infection [33/99 vs 17/113; $p = 0.002$; OR = 2.82, 95% CI (1.39–5.76)].

Conclusion—The feeling of fear, lack of compassion and tendency to avoid TB patients reported by 51% of the patients is a cause of concern. Addressing the knowledge gaps through training programs and ensuring safe working environment will make residents more supportive and compassionate towards TB patients which will contribute to TB control.

Keywords

Attitude towards TB patients; Stigma

Introduction

One of the ways by which activities of health professionals may expose patients of TB to stigmatization is their behavior towards patients with TB.¹ This may reinforce the stigma attached to the disease by the society at large which has wider socio economic ramifications. The feelings of HCWs towards TB patients may have an impact on their own behaviours when they manage the TB patients.

Treatment of TB patients with the Directly Observed Treatment- Short course therapy (DOTS) under RNTCP is peculiar as patients are expected to visit the health units at regular intervals and have frequent encounters with the health care workers. All TB patients need to be compliant with their treatment to get well and their interaction with health care providers can be a key factor in how compliant patients are with their care. Studies have described that the attitudes and behaviour of health care workers affects the health care seeking behavior leading to delay in diagnosis as well as impairs adherence to treatment.^{2,3} Patients not treated well by the health care system or stigmatized are less likely to take their medications and be cured, increasing the risk of TB mortality and MDR-TB as well as continuing the chain of transmission in the community.

Resident doctors are medical graduates who have registered for post-graduation courses at teaching hospitals and play a key role in the management of patients, particularly during the initial diagnosis phase and whenever complications arise. They are key providers of diagnosis and treatment to TB patients, particularly the sickest TB patients who need hospitalization in a tertiary health care center. We don't have much information on the attitudes of resident doctors towards TB patients. We undertook this study to document their attitudes and identify opportunities to improve the care of TB patients and reduce the stigma they feel.

Methodology

A cross-sectional study was conducted at B.J. Government Medical College and Sassoon General Hospital, a government teaching hospital in Pune, India in September 2014. The study population included post-graduate medical resident doctors of clinical and laboratory based paraclinical departments.

A pre-tested semi-structured questionnaire was used for data collection. The question for assessing TB attitudes and stigma suggested in the World Health Organization (WHO) guide for knowledge, attitude, and practice surveys was modified to assess attitudes toward TB patients.⁴ The question enquired their feeling about patients with TB disease with the following options: (a) "I feel compassion and desire to help."; (b) "I feel compassion but I tend to avoid managing such patients."; (c) "I fear them because they may infect me."; (d) "I have no particular feeling"; and (e) Others. The responses in the 'others' category were reclassified into the four options for further analysis. The questionnaire included questions on other variables, including residence, duration of work, frequency of exposure to TB patients, past history of TB, training on TB and knowledge about another resident with TB.

This study was reviewed and approved by the ethics committees of BJ Government Medical College and The Johns Hopkins University School of Medicine. Written informed consent was obtained from each respondent. Investigators distributed the questionnaires to the residents either at the beginning or end of a meeting as part of standard departmental postgraduate academic activities.

The associations between background characteristics and attitude were assessed using chi square/Fisher's exact test using SPSS (Version 16). A p-value of less than 0.05 was considered to be statistically significant. Odds ratio with 95% confidence interval were calculated to assess the strength of association.

Results

Of 325 resident doctors registered for postgraduate courses at the institute, 305 (94%) were invited to participate. Of the 20 resident doctors who could not be contacted, seven were on leave and 13 were posted on rotation to another department. Out of the 263 respondents (86% of residents contacted) who consented to participate, 212 (81%) responded to the question on the feeling about patients with TB disease.

Of the 212 respondents, 116 (55%) were males, 174 (82%) were residing in a hostel, 108 (51%) reported to work for 12 hours or more and 132 (62%) had daily exposure to TB patients. Only 40 (19%) reported to have attended a training program on TB in the past. A total of 35 (17%) were assessed for TB in the past while 10 (5%) had a past history of TB. A total of 99 (47%) residents knew of a colleague who had been diagnosed with TB and 59 (28%) knew of a colleague in their own department who had TB.

Only 104 (49%) residents reported feeling compassion and a desire to help TB patients. The rest reported to feel compassion yet avoid TB patients, fear and think that they may cause infection or have no particular feeling. (Table 1) The comments mentioned in the 'others'

category of responses include – ‘*Whatever anyone may feel we have to manage patients in wards*’ (Category: Have no particular feeling); ‘*TB is treatable and would want to treat, manage and cure them*’ (Category: Feeling compassion and a desire to help); ‘*I feel compassion and desire to help but after ensuring my safety*’ (Category: Feeling compassion and a desire to help).

Having attended a training program in TB was significantly associated with their attitude toward TB patients ($\chi^2 = 13.54$; $df = 1$; $p = 0.004$) (Table 2). The residents who had attended a training program in TB were three times more likely to report compassion and a desire to help TB patients than those who had not undergone such training [28/40 vs 76/172; $p = 0.005$; OR = 2.95, 95% CI (1.33–6.61)].

Knowing another colleague who had been diagnosed with TB was significantly associated with their attitude toward TB patients ($\chi^2 = 11.3$; $df = 1$; $p = 0.01$) (Table 2). Compared to residents who did not know of a colleague with TB, residents who knew of a colleague with TB were nearly three times more likely to report a tendency of avoiding TB patients or fear them thinking they may cause infection [33/99 vs 17/113; $p = 0.002$; OR = 2.82, 95% CI (1.39–5.76)].

Discussion

Only 49% of the resident doctors surveyed reported compassion and a desire to help TB patients. Studies have reported instances in which the service providers have been rude, unhelpful and did not provide attention and support to TB patients.^{5,6} On the other hand, a cordial relationship between patients and health staff has been shown to be the main motivating factor for completion of TB treatment.⁷

Resident doctors who reported prior TB-specific training were more likely to have a positive attitude towards TB patients. But very few resident doctors reported to have attended such training. In a prior study, training workshops in TB control were demonstrated to be effective for promotion of knowledge and elimination of stigmatization in first-line caregivers.⁸ Our data supports the need and value of providing all resident doctors caring for TB patients with specific training.

Residents with knowledge of a colleague with TB may perceive the risk of occupationally acquired TB to be more real and hence report feeling afraid of TB patients and an unwillingness to help. Studies from India have reported the risk of occupationally acquired TB among health care workers along with inadequate infection control measures in place.⁹ Hence it is necessary to address the issues regarding prevention and control of transmission of TB in health care setup. It is important to ensure occupational safety for health care workers with a safe working environment and adequate measures for prevention of TB transmission at workplace. In addition well-defined strategies to minimize TB-related stigma and discrimination can be utilized to formulate and implement sustainable TB anti stigma campaigns.¹⁰

This study throws light on the attitude of resident doctors at a tertiary health care center though the findings cannot be generalized to other cadres on health care workers at the

institute or working under RNTCP. Yet it raises the issue of the feeling of fear and apprehension about TB patients among health care workers which needs to be studied and addressed urgently.

While we assume residents have a moral responsibility to be supportive and compassionate towards their patients, addressing knowledge gaps and ensuring safe workplace may enhance natural tendencies that have been suppressed due to stigma and fear. In addition, trainees are in a unique position to contribute to de-stigmatize TB in their community, through their attitudes and behavior towards TB patients.

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Highlights

- **Topic:** The attitude of health care workers towards TB patients is an important factor which can affect the patient's health care seeking behavior, treatment adherence and reinforce stigma attached to the disease by the society. This study helps us understand the attitudes of resident doctors towards TB patients along with factors associated with these attitudes.
- **Study Population:** The postgraduate resident doctors at a tertiary care hospital play an important role in diagnosis and management of TB patients.
- **Implications:** The study reiterates the need of training of resident doctors in Tuberculosis and provision of safe working conditions to prevent TB transmission at workplace. These interventions have the collateral benefit of improving the attitudes of the doctors towards TB patients.

Table 1
Attitude of resident doctors towards tuberculosis patients

Feeling about patients with TB disease	N	%
I feel compassion and desire to help	104	49.06
I feel compassion but tend to avoid managing such patients	23	10.85
I fear them and think they may infect me	27	12.74
I have no particular feelings	58	27.36
Total	212	100.00

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Table 2
Attitude of residents towards TB patients according to background characteristics

Variable	Groups	Compassion and desire to help N = 104	Compassion but tend to avoid managing such patients N = 23	Fear them and think they may infect me N = 27	No particular feelings N = 58	Chi-square	P value
Gender	Male (N = 116)	58 (50)	12 (10.3)	12 (10.3)	34 (29.3)	0.016	0.66
	Female (N = 96)	46 (47.9)	11 (11.5)	15 (15.6)	24 (25)		
Year of residency	First year (N = 56)	27 (48.2)	8 (14.3)	7 (12.5)	14 (25)		
	Second year (N=83)	40 (48.2)	8 (9.6)	9 (10.8)	26 (31.3)	0.02	0.9
	Third year (N=73)	37 (50.7)	7 (9.6)	11 (15.1)	18 (24.7)		
Residence	Hostel N=(174)	86 (49.4)	20 (11.5)	20 (11.5)	48 (27.6)	0.016	0.66
	Local residence (N=38)	18 (47.4)	3 (7.9)	7 (18.4)	10 (26.3)		
Duration of work	<12 h (N=104)	56 (53.8)	10 (9.6)	15 (14.4)	23 (22.1)	3.75	0.29
	12 h (N=108)	48 (44.4)	13 (12)	12 (11.1)	35 (32.4)		
	Every day (N = 132)	59 (44.7)	15 (11.4)	22 (16.7)	36 (27.3)	5.68	0.128
Attended training program on TB	Others (N=80)	45 (56.2)	8 (10)	5 (6.2)	22 (27.5)		
	No (N = 172)	76 (44.2)	18 (10.5)	22 (12.8)	56 (32.6)	13.54	0.004
	Yes (N = 40)	28 (70)	5 (12.5)	5 (12.5)	2 (5)		
Assessed for TB in past	No (N = 177)	83 (46.9)	18 (10.2)	23 (13)	53 (29.9)	0.042	0.245
	Yes (N = 35)	21 (60)	5 (14.3)	4 (11.4)	5 (14.3)		
Past H/o TB	No (N = 202)	99 (49)	20 (9.9)	25 (12.4)	58 (28.7)	6.86	0.07
	Yes (N = 10)	5 (50)	3 (30)	2 (20)	0 (0)		
Know of a colleague with TB	No (N = 113)	58 (51.3)	7 (6.2)	10 (8.8)	38 (33.6)	11.3	0.01
	Yes (N = 99)	46 (46.5)	16 (16.2)	17 (17.2)	20 (20.2)		