

## PSYCHOSOCIAL REACTION OF DIAGNOSING TUBERCULOSIS – AN EXPERIENCE OF TERTIARY CARE CENTER OF RURAL GUJARAT

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### ABSTRACT

**Background:** In India Tuberculosis (TB) is the major public health problem. It is still been considered as social stigma by many people especially in rural areas. It is necessary to pay more attention towards psychosocial needs of the patients so that they accept the anti TB treatment easily without any fear. This will result in good adherence to treatment and better cure rate can be achieved.

**Aims & Objectives:** The main aim of study is to assess the psychosocial problems & issues related to social stigma for tuberculosis and its treatment in rural population.

**Materials and Methods:** A prospective cross sectional study was conducted at rural tertiary care center at Dist. Bhavnagar, Gujarat. A structured interview was taken with prior consent and data was collected for the patient newly diagnosed as Tuberculosis.

**Results:** A significant proportion of patients were found to have adverse psychosocial reaction on informing that they are suffering from TB ( $p < 0.05$ ). Most commonly observed feelings by patients during interview were, (1) worry about cure and fear of death (2) embarrassment due to disease (3) misconception of the disease being a social stigma (4) cursing the fate that this happened to me.

**Conclusion:** Psychological reaction of patient plays a significant role in course and cure of TB. Psychological factors should be addressed while treating TB which will in turn help to deliver quality care to patient of Tuberculosis. It will lead to better compliance, adherence and completion of treatment and this will increase cure rate.

**Key Words:** : Tuberculosis, Psychosocial; Stigma; Revised National Tuberculosis Control Program (RNTCP)

### Introduction

Despite the discovery of Mycobacterium tuberculosis bacilli more than hundred years ago, and all the advances in our knowledge of disease made and best options available for diagnosis and treatment, TB still remains one of the major health problem facing mankind, and particularly in developing countries. It is still commonest cause of death from single infectious disease. Approximately 8 million new cases and 2 million deaths in India are due to Tuberculosis.<sup>[1]</sup> It is still a challenge to clinicians, public health professionals and health policy makers in India. Our TB program, previously NTP and at present RNTCP are mainly concentrate on diagnosing & treatment of disease and as a result to prevent the spread of disease in the community, but minimum attention is paid on the psychosocial impact of disease. According to Kleinman (1980), it is necessary to provide care that effectively meets the patients and their family member's psychosocial needs.<sup>[2]</sup> A sensitive clinician will look after disease & its treatment with patient's psychosocial status also. Review of literature suggests that there are very few studies on psychosocial experiences & feeling of rural TB patients. Psychosocial problems are very important to keep in mind during formulation of policies, programs and interventions that provide culturally sensitive supportive care to the

patient. The main object of this study was to study psychosocial reactions of patient during the diagnosis of TB and to explore the factors that give this reaction. These reactions are of patients individually as well as society reaction towards TB patients. Hence this study was undertaken.

### Materials and Methods

This prospective cross sectional study was undertaken in dept. of TB & Chest at tertiary care hospital located in rural area of Dist. Bhavnagar – Gujarat, during April 2010 to June 2010, newly diagnosed pulmonary TB patients above the age of 18 years and residing in rural area were selected for this study. Written informed consent was obtained before taking detail information. The approval was taken from Institutional ethics committee.

A structured interview was used for collection of data for each patient in their local language. The main question asked to each patient was “what is the feeling in your mind?” when informed that they are suffering from TB.

### Statistical Analysis

All data were analyzed with the help of SPSS version 20 software. Analysis was done to obtain percentage wise

distribution of different variables and these variables tabulated as mentioned below in results. The observations were compared with previous studies and significance in difference of proportions was calculated. A 'p' value of less than 0.05 was considered to be significant.

## Results

120 patients were registered in the study and were interviewed in detailed. Out of 120 patients 79 were of sputum positive pulmonary tuberculosis, 27 were of sputum negative pulmonary tuberculosis and 14 were of extra pulmonary tuberculosis. The sociodemographic data of patients is described in table 1.

**Table-1: The sociodemographic data of patients**

Variables	No. of Patient	%	
Age in years	18-25	13	10.8
	26-35	24	20
	36-45	29	24.2
	46-55	30	25
	Above 55	24	20
Gender	Male	88	73.3
	Female	32	26.7
Marital Status	Married	96	80
	Single	15	12.5
	Widow/widower	9	7.5
Education	Illiterate	74	61.7
	Literate up to high school	43	35.8
	Graduate and above	3	2.5
Occupation	Farmers	54	45
	Labourers	49	40.8
	Self-employed and professionals	17	14.2

**Table-2: Psychological reaction of the patient at the diagnosis of TB**

Reaction	No. of Patients	%
1. Depression/ Anxiety	49	40.83
2. Fear of spreading TB in the family	80	66.66
3. Life partner's harassment leading to end of marital relation	12	10.00
4. Fear of getting isolated from society and workplace	58	48.33
5. Worry regarding future marriage prospects	23	19.16
6. Fear of losing job	69	57.50
7. Misconception about the disease, for e.g. TB is a hereditary disease	38	31.66
8. Fear of death	18	15.00
9. Embarrassment/ shame	20	16.66
10. Cursing their Fate	22	18.33
11. Feeling of being relaxed as they were in belief of malignancy and in last 6 month they spent a lot of money and suffered a lot for arriving to correct diagnosis	4	3.33

Out of 120 patients 28 (23.3%) were not ready to accept the diagnosis and they refused for treatment but after proper counseling and after second opinion of other doctors regarding diagnosis, they all became ready to start the treatment. In our study 28 (23.3%) of patients started delayed treatment. This observation was better in our study than that observed in other study by Abebe

et al in which 46.2% (n=220) of patients refused for treatment at all (p<0.05).<sup>[3]</sup> This may be due to better functioning of Revised National Tuberculosis Control Program (RNTCP) in our country.

In our study the observation of worry and depression 49 (40.8%) and of embarrassment 20(16.7%) was different than that found in study by Dhingra et al in 2010.<sup>[4]</sup>

Some observations in our study were in line with CDC study like feeling of embarrassment 20 (16.7%), misconception regarding disease 38 (31.7%), patient feeling isolated by customary beliefs that food/utensils gets contaminated on being used by patients and being separated from common room in family and not being invited in social functions.<sup>[5]</sup>

The percentage distribution of patients to most commonly observed psychological reactions on being informed that they are suffering from TB are summarized in table 2.

## Discussion

Previously in pre-chemotherapy era patients were isolated and admitted in TB sanatorium. Those sanatoriums later developed as TB hospitals. The patients used to stay there for months. But now the situation is different and TB patients are no more isolated from the society. In spite of this the present study shows that the psychosocial impact of the diagnosis of TB on patients is significant and patients, their relatives and society consider TB as a stigma. Stigma is a social determinant of health. When any disease is stigmatized the patient becomes reluctant for getting treatment.

In a multi centric study conducted in multiple countries by Somma et al in 2008, the overall stigma index was found highest in India.<sup>[6]</sup> Another study from Chennai reported that TB patients less than 45 years of age felt ashamed of discussing their disease status with their relatives and friends.<sup>[7]</sup> The possible reason cannot be explained in the present context and hence need to be explored further in larger multi centric study.

The limitation of this study was that it was conducted in rural part of Gujarat at tertiary care center however it may not represent general population of entire country. The strength of the study was that it attracts our attention into the psychosocial aspects of tuberculosis and the stigma associated with it.

## Conclusion

The diagnosis of tuberculosis leaves behind a significant psychological trauma to the patients as observed in this study. So it is necessary for every physician treating a TB patient to find out the hidden psychological reaction of patients by proper interview and address these issues by proper counselling and obtaining support from the society and relatives. This will lead to better compliance, adherence and proper completion of treatment which in turn will increase cure rate.

## References

1. World Health Organization. The global burden of TB. In: Global Tuberculosis control: WHO report 2012. Geneva: World Health Organization; 2012: 7
2. Kleinman A. Patients and Healers in the context of culture. London: University of California Press, 1980.
3. Abebe G Deribew A, Apers L, Woldemichael K, Shiffa J, Tesfaye M, et al. Knowledge, Health seeking Behaviour And Perceived Stigma Tuberculosis among Tuberculosis suspects in a rural community in/southwest Ethiopia. PLoS One 2010;5(10):e13339. doi: 10.1371/journal.pone.0013339.
4. Khan S, Dhingra VK. A Sociological study on stigma among TB patients in Delhi. Indian J Tuberc 2010; 57: 12-8
5. Common perceptions, attitudes and beliefs about tuberculosis among Somalis - Findings from Tuberculosis-specific Behavioral and Social Science Research. [Internet] Available from: <http://www.cdc.gov/tb/publications/guidestoolkits/EthnographicGuides/Somalia/Chapters/Chapter4.pdf>.
6. Somma D, Thomas BE, Karim F, Kemp J, Arias N, Auer C, et al. Gender and socio cultural determinants of TB-related stigma in Bangladesh, India, Malawi and Colombia. Int J Tuberc Lung Dis 2008; 12(7): 856-66.
7. Balasubramanian R, Garg R, Santha T, Gopi PG, Subramani R, Chandrasekaran V, et al. Gender disparities in tuberculosis: report from rural DOTS programme in south India. . Int J Tuberc Lung Dis 2004; 8(3): 323-32.

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