



## A STUDY ON EXTRA PULMONARY TUBERCULOSIS: SOCIO ECONOMIC CLASS DISTRIBUTION

**Dr Chhotala Yagnik** (MD Medicine),

**Dr Chetal Suva\*** (MD Pathology), \*Corresponding Author

**Dr Vishal Oza** (MD Medicine),

### ABSTRACT

**Background:** Extra-pulmonary tuberculosis can affect the lymph nodes, pleura, bones, joints, genito-urinary tract, nervous system (meningitis, tuberculoma), abdominal tuberculosis (intestines, mesentery, solid organs), skin.

**Materials and Methods:** It is a record based, observational prospective study which assesses the presentation and evaluation of the socio-economic distribution of extrapulmonary tuberculosis and management of it in a tertiary care hospital.

**Result:** In present study, out of 50 cases 52% patients were from low socio-economic class, 44% patients were from middle socio-economic class and 4% were from high socio-economic class.

**Conclusion:** The frequency of extrapulmonary TB in this study was highest in low socio-economic class followed by middle and high socio-economic class.

**KEYWORDS :** extrapulmonary, TB, socio-economic.

### INTRODUCTION

Tuberculosis (TB) is an infectious disease caused by genus *Mycobacteria*. The disease primarily affects lungs and causes Pulmonary TB (PTB).

Extra-pulmonary tuberculosis can affect the lymph nodes, pleura, bones, joints, genito-urinary tract, nervous system (meningitis, tuberculoma), abdominal tuberculosis (intestines, mesentery, solid organs), skin.<sup>[1]</sup>

All those who get infected do not necessarily develop tuberculosis. The lifetime risk of breaking down to disease among those infected with tuberculosis is 10-15%, which gets increased to 10% per year amongst those co-infected with HIV.<sup>[2]</sup> Other determinants such as diabetes mellitus (DM), tobacco smoking products, alcohol abuse, malnutrition, immunosuppressive conditions also increase the risk of progression from infection to tuberculosis disease.<sup>[3,4]</sup>

Identification of mycobacterial presence in a clinical sample is a specific diagnostic test.

Diagnosis of extra pulmonary tuberculosis and sputum smear negative pulmonary tuberculosis is challenging due to pauci bacillary disease and is mostly multidimensional involving judgmental assessment of clinical features and disease related structural radiological changes.

This study was undertaken to analyze the various clinical presentations in patients with extra pulmonary tuberculosis in the Department of General Medicine, a tertiary care hospital, Jamnagar.

### AIMS AND OBJECTIVES

To classify extra pulmonary tuberculosis patients in relation to various socio-economic class.

### MATERIAL AND METHODS

#### STUDY DESIGN

It is a record based, observational prospective study which assesses the presentation and evaluation of socio-economic class distribution of extrapulmonary tuberculosis and management of it in a tertiary care hospital.

#### STUDY PERIOD

Study was conducted between November-2019 to November-2020

### SAMPLE SIZE

In the study period of 12 months among the patients seen under the Department of General Medicine, after applying inclusion criteria, 50 patients were included in this study.

### INCLUSION CRITERIA

- All extrapulmonary tuberculosis patients
- Those willing to give written consent
- All previous tuberculosis patients
- All patient with other co-morbid conditions

### EXCLUSION CRITERIA

- Not willing to give written consent
- Pulmonary tuberculosis patient

### OBSERVATION

**Table-1: Socio-economic class Distribution of extrapulmonary tuberculosis (n=50)**

Socio economic class	No. of patients	Percentage (%)
High	2	4
Middle	22	44
Low	26	52
Total	50	100

In present study, out of 50 cases 52% patients were from low socio-economic class, 44% patients were from middle socio-economic class and 4% were from high socio-economic class.

### DISCUSSION

**Table-2: Comparison of present study with other studies**

Socio-economic class	S. Ramaprakash <sup>[5]</sup> n=528	Present Study n=50
High	19 (3.46%)	2 (4%)
Middle	180 (37.3%)	22 (44%)
Low	329 (59.22%)	26 (52%)

In S. Ramaprakash study 59.22 cases from low socio-economic class, 37.3% cases from middle socio-economic class and only 3.46% cases from high socio-economic class.

In present study 52% cases from low socio-economic class, 44% cases from middle socio-economic class and only 4% cases from high socio-economic class.

### CONCLUSION

The frequency of extrapulmonary TB in this study was highest in low socio-economic class followed by middle and high socio-economic class.

#### REFERENCES:

- 1) Sharma SK, Mohan A Tuberculosis, 2st edition, new Delhi, Jaypee brothers medical publisher, 2009
- 2) World Health Organization (2011). "The sixteenth report on Global tuberculosis"
- 3) Harries a, Maher D. Graham B. TB/HIV clinical manual, 2nd edition WHO Library cataloguing in publication data 2004
- 4) TBIndia annual performance report 2016 part 1 -  
<http://tbcindia.nic.in/showfile.php?lid=3180>
- 5) S. Rama Prakash, G. Suresh and G. Ganesh Kumar; Mapping the pattern and trends of extra pulmonary TB, Journal of global infectious disease. Dis. 2013 Apr. Jun, 5 (2): 54-59.