

## THE BURDEN OF TUBERCULOSIS IN INDIA IN THE CONTEXT OF THE CURRENT PUBLIC HEALTH PROGRAMMES

Shaji Sruthi Anisha

Universitatea de Stat de Medicină și Farmacie „Nicolae Testemițanu”, Catedra de medicină socială și management sanitar „Nicolae Testemițanu”, Chisinau, Republica Moldova

### Introduction

Despite newer modalities for diagnosis and treatment of tuberculosis (TB), eliminating its burden remains a distant goal globally. TB represents a major public health problem in India with the largest number of TB cases in the world. According to WHO, India experience a ‘high burden’ of TB nowadays.

### Purpose

To analyse the epidemiological aspect of TB in India and its risk factors in the context of the current public health policies aimed at reducing its burden in the country.

### Material and methods

A systematic review of the published articles was done with criteria as: 1) English language; 2) the 2001–2019 period of the publication; 3) 10 and more citations of article. We used various biomedical databases such as PubMed, NCBI to assess risk factors and challenges that pose a hurdle for amelioration. Incidence and mortality rates were analyzed using official data of IndiaStat and MOSPI.

### Results

Incidence rate of TB has come down from 288 in 2001 to 199 per 100.000 in 2018. The mortality rate has decreased from 80 in 2001 to 32 per 100.000 in 2018. Along with well-established risk factors (such as human immunodeficiency virus, malnutrition), emerging variables such as diabetes, indoor air pollution, alcohol, immunosuppressive drugs also play a significant role. Socioeconomic and behavioral factors increase the susceptibility to infection. The large-scale implementation of the Indian government’s programmes provide free laboratory services and has introduced all six oral LfxREZ regimen for H mono/poly patients.

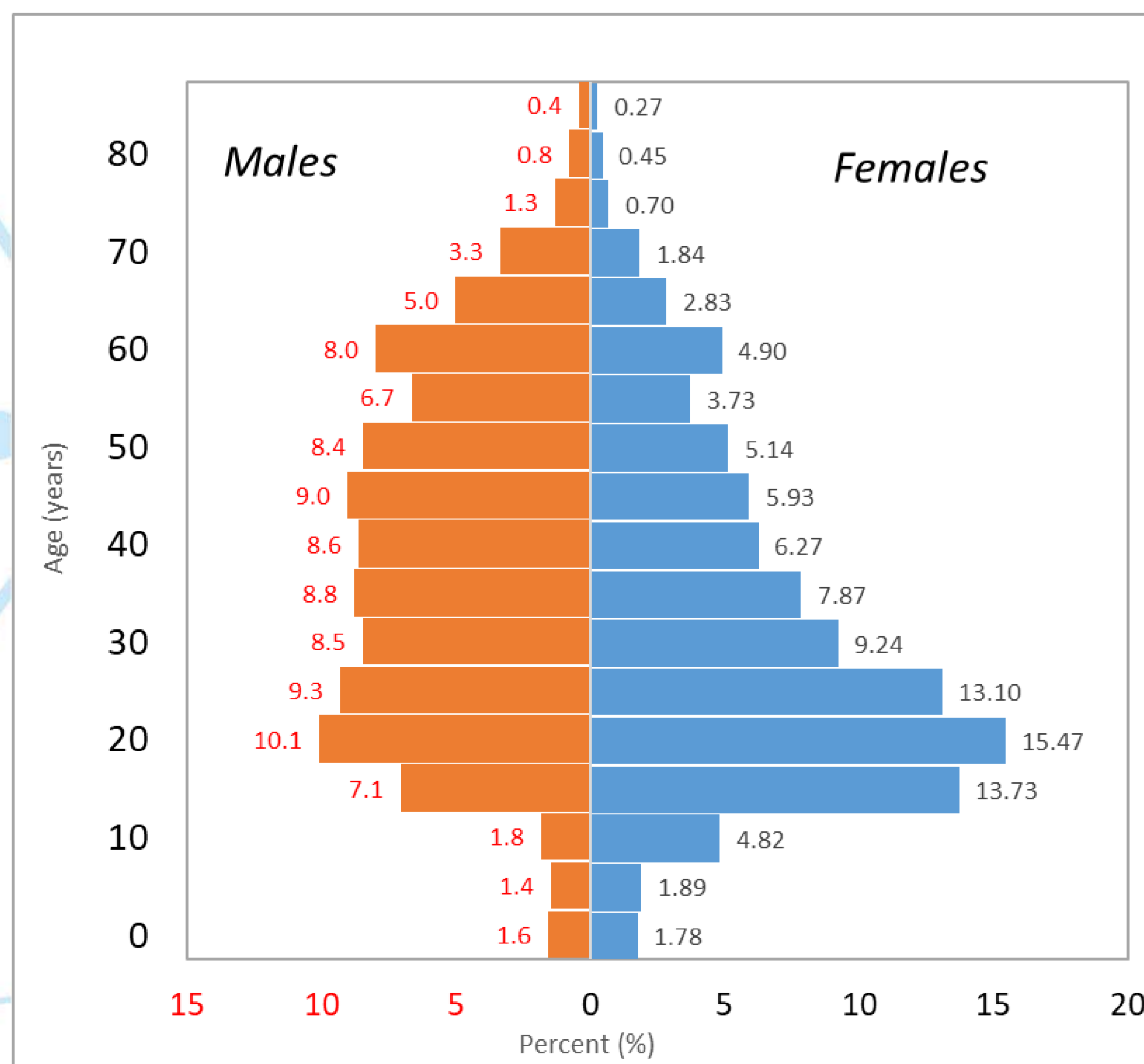


Figure 1. AGE-SEX PYRAMID OF TB in India, 2018

Source: IndiaStat

TABLE 1. Estimates of TB burden in India and Global, 2016 (abs.)

INDICATOR	INDIA	GLOBAL
Incidence of TB (including HIV)	2.790.000	10.400.000
Mortality due to TB (excluding HIV)	423.000	1.300.000
Incidence of MDRTB/RR	147.000	601.000
Incidence of HIV-TB	87.000	1.030.000

Source: IndiaStat

### Conclusions

A collaborative effort is in progress to improve primary health care (PHC) in rural areas. Major challenges to control TB in India are poor PHC infrastructure, irrational use of anti-TB drugs, multidrug-resistant TB and above all, corruption. The government aims to eliminate TB by 2025.

**Keywords:** tuberculosis, incidence rate, mortality rate, multidrug-resistant TB