



Burden of Tuberculosis in a Private Indian Setting: An Experience

Suneetha Narreddy¹, Aparna Yerramilli², Sneha Amulya Allam², Sai Priya Sesha², Sarika Kumari Boinapalli², Archana Trivedi³, Ratna Rao¹

Ratnamani Sharma¹, Asra Farheen and Sarabjit Chadha³

(1) Apollo Hospital, Hyderabad, India (2) Sri Venkateshwara College of Pharmacy, Hyderabad, India (3) International Union Against Tuberculosis and Lung Diseases, New Delhi, India



BACKGROUND

Notification of TB cases from the private sector to state public health officials is a challenge. This helps to improve the standard of care. From 2009-2014, only 8.4% of total TB cases from the private sector were notified, with a majority being unaccounted for. Multidrug resistance (MDR) TB is a major challenge which needs to be addressed by all the stakeholders.

AIM

To study the burden of TB in a private sector, determine the site of disease and estimate drug resistance.

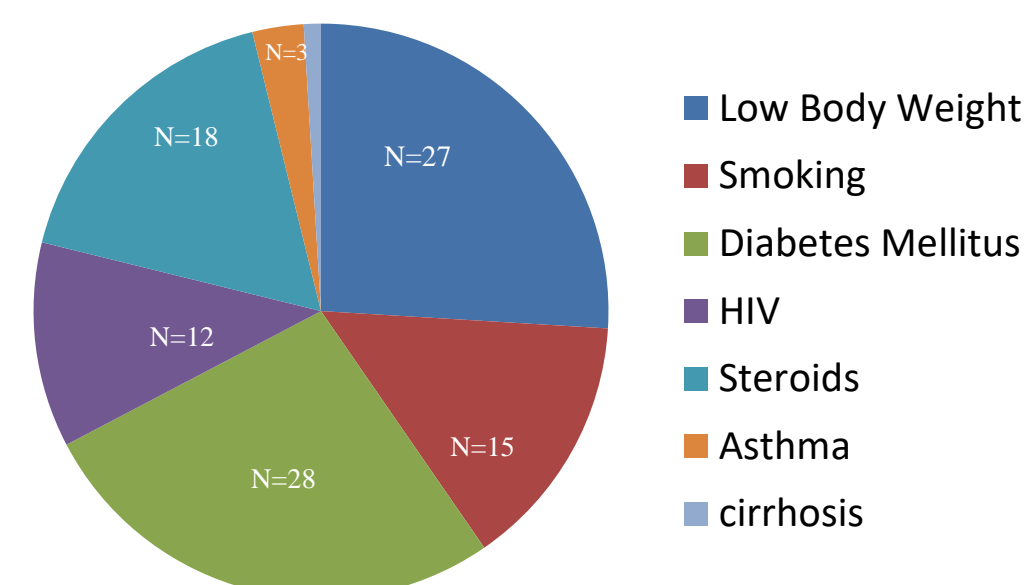
METHODS

A Single centre prospective study was conducted in a tertiary care hospital. Patients over 18 years diagnosed with TB from July 2015 to May 2016 were included. Transplant patients and those with hematologic malignancies were excluded.

RESULTS

Characteristics		No of patients (n = 271)	
Gender	Male	153	Female 118
	Female	118	
Age (yrs)	18-30	44 (50.5%)	42 (49.4%)
	31-45	40 (52.6%)	36 (47.3%)
	46-60	44 (65.6%)	23 (34.3%)
	>60	25 (59.5%)	17 (40.4%)
History of TB	New cases	244(90.04%)	
	Relapse	27(9.96%)	

RISK FACTORS



Basis of diagnosis	No of patients (n=271)
Microbiological	121 (44.64%)
Histopathological	116 (42.80%)
Radiological	34 (12.54%)

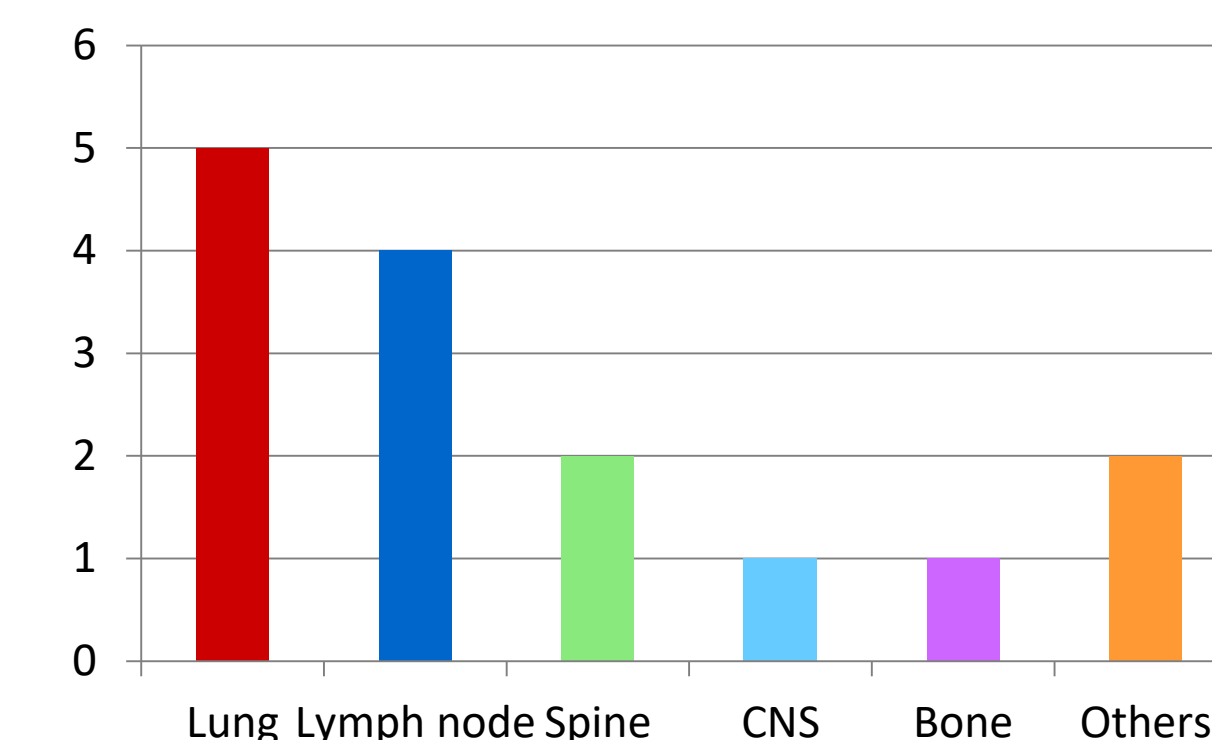
Xpert NAAT Results (n=80)

MTB	Not detected	47
	Detected	28
	Detected with RIF resistance	05

Site of disease	No of patients (n=271)
Pulmonary TB	84 (30.99%)
Extrapulmonary TB	187 (69.00%)
Lymph node	70 (25.83%)
Spine	33 (12.17%)
CNS	32 (11.80%)
Disseminated	17 (06.27%)
Abdominal	16 (05.90%)
Osteomyelitis	07 (02.58%)
Endometrial	05 (01.84%)
Ocular	03 (01.10%)
Dermal	02 (00.73%)
Genitourinary	02 (00.73%)

Drug resistance pattern	No of patients (n=15)
De novo resistance (10)	
H + R + E	4
R	4
H + PAS	1
H + R	1
Relapse (5)	
R	2
H + R	1
H + R + FQ + PAS	2

SITE OF MDR TB



DISCUSSION

In our study population the incidence of TB was commonly seen in young adults. A small number of relapse cases were also observed. Diabetes mellitus, HIV, smoking and immunosuppressant use accounted for the common risk factors. A combination of microbiology and histopathology were used for the diagnosis. Extra pulmonary TB was higher than pulmonary TB, which stresses the significance of appropriate diagnostic tests. Xpert NAAT tests and Hains drug sensitivity were used to detect MTB and RIF resistance. There is a need for increased detection of resistance and appropriate treatment regimens to reduce the TB burden.

CONCLUSION

The burden of multi drug resistant Tuberculosis is increasing in India. Most of the population seek private health sector which out number public health care sectors as they offer better geographical access and personalized health care. Hence involvement of private sector is important to improve effectiveness and outreach of TB control efforts in India.

REFERENCE

- The Union Organisation against TB & lung diseases - (<http://www.theunion.org/>)
- Tuberculosis control programme in India (http://www.searo.who.int/india/tuberculosis/topic/tb_rntcpguidelines/en/)