

# Clinical Profile of Hypertensive Patients Attending a Teaching Hospital in Hyderabad.

Jammula Prabhakar Patro<sup>1</sup>

<sup>1</sup>Associate Professor, Department of General Medicine, ESIC Medical College Hospital, Sanathnagar, Hyderabad, India

Received: October 2016

Accepted: December 2016

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## ABSTRACT

**Background:** Hypertension is a common disease, which affects vital organs. **Objectives:** To study clinical profile, comorbidities and complications in hypertensive patients attending out-patient department of a new teaching hospital in Hyderabad. **Methods:** The subjects of the study were the hypertensive patients, attending out-patient department of medicine unit. This was a descriptive pilot study. Data was collected in a predesigned questionnaire. **Statistical analysis:** Percentages of prevalence was calculated. **Results:** 70% were male. 9% had diabetes. Family history of hypertension was present in 12% of the hypertensive patients studied. 2.2% had retinopathy. **Conclusion:** In spite of being easily detected and easily managed, many patients are referred to tertiary care hospitals.

**Keywords:** Hypertensive patients, teaching hospital, common disease.

## INTRODUCTION

Hypertension is an important cause of premature death worldwide.<sup>[1]</sup> 20.6% of Indian men and 20.9% of Indian women were suffering from Hypertension in 2005.<sup>[2]</sup> Higher prevalence of hypertension was seen among tea plantation workers of Assam due to excess consumption of salt, alcohol and Khaini.<sup>[3]</sup> Hypertension in India is more prevalent in lower education group than in higher education group.<sup>[4]</sup> In a multicentre study from India, only 25.6% of treated hypertensive patients had their blood pressure under control.<sup>[5]</sup> Hypertension is a controllable disease and a 2 mmHg population-wide decrease in BP can prevent 151,000 stroke and 153,000 coronary heart disease deaths in India.<sup>[6]</sup> Framingham study reported that there was a continuum of risk of stroke and coronary heart disease with increasing diastolic BP and the levels where risks were not present were unknown.<sup>[7]</sup> An Indian epidemiological study reported that 70% of hypertensive would be in Stage I hypertension (systolic BP 140–159 and/or diastolic BP 90–99 mmHg).<sup>[8]</sup> The Treatment of Mild Hypertension Study (TOMHS) showed that lowering of mildly raised BP (Stage I hypertension: systolic 140–159 and/or diastolic 90–95 mmHg) by drugs was associated with improved outcome as compared to

the placebo group.<sup>[9]</sup> Hypertension is directly responsible for 57% of all stroke deaths and 24% of all coronary heart disease deaths in India.<sup>[10]</sup> Resistant hypertension is defined as a clinical situation in which blood pressure is not controlled despite optimal antihypertensive treatment, including at least three antihypertensive drugs (one of them preferably being a diuretic) at full doses.<sup>[11]</sup> Patients with resistant hypertension more frequently present with secondary causes of hypertension and with more severe target organ damage.<sup>[12]</sup> Ambulatory blood pressure monitoring (ABPM) has become a very useful (and sometimes essential) tool for the diagnosis and management of hypertensive patients.<sup>[13]</sup> The CARDIORISC project involved the distribution of validated ABPM monitors (SpaceLab 90207/Microlife Watch BP 03) to more than 1000 physicians from various health-care settings, 75% of whom were general practitioners.<sup>[14]</sup> Persistently high values despite antihypertensive treatment are associated with an increased risk of cardiovascular episodes and death.<sup>[15]</sup>

### Aim:

To study clinical profile, comorbidities and complications in hypertensive patients attending out-patient department of a new teaching hospital in Hyderabad.

## MATERIALS AND METHODS

The descriptive study was conducted in ESIC medical college hospital, Hyderabad. Hypertensive patients attending out-patient department (OPD) of

### Name & Address of Corresponding Author

Dr. Jammula Prabhakar Patro  
Associate Professor,  
Department of General Medicine,  
ESIC Medical College Hospital,  
Sanathnagar, Hyderabad, India.

medical unit between 1st August 2016 and 30th September 2016 were studied. Inclusion criteria were: one, willing to give consent for study and two, having recent (less than one month old) laboratory reports. Exclusion criteria were: one, refusal to give consent and two, no recent lab reports. Verbal consent was obtained before collecting the data. Data was recorded in a predesigned proforma.

### RESULTS & DISCUSSION

There were 509 hypertensive patients attending OPD from 1st August 2016 to 30th September 2016. Out of them, 399 patients had recent laboratory reports. Again out of them, only 219 patients gave consent to the study.

149 (68.0 %) were male and 70 (31.9%) were female patients. 45(20.5%) had diabetes. 29 (13.2 %) had dyslipidaemia. Family history of hypertension was present in 25(11.4 %) patients. Coronary artery disease (CAD) (7.7%) was more common than CVA (0.9%) in the hypertensive patients who attended the out-patient department.

**Table 1: Co-morbid conditions and complications in 219 hypertensive patients.**

Sl no	Associated abnormality	Number of hypertensive patients	%
1	Diabetes	45	20.5
2	Dyslipidaemia	29	13.2
3	Retinopathy	5	2.2
4	Nephropathy	2	0.9
5	CAD	17	7.7
6	CVA	2	0.9
7	Positive family history	25	11.4

There are certain limitations of the study .The study was a pilot study. So larger studies may show different results. This is a hospital meant for factory workers, whose salary is below a certain cut off limit. So all belonged to a one socio-economic class. Results may vary when all classes of people are included in the study. Also hypertensive patients with acute complications attending the emergency department were not included. Hypertensive patients with no recent laboratory reports were also not included. So, actual incidence of complications may be higher than that stated in this pilot study.

### CONCLUSION

Hypertension is a common disease. In spite of being easily detected and easily managed, many patients are referred to tertiary care hospitals. Pressure from factory workers on doctors manning primary care and secondary care hospitals may be the reason for referral to tertiary care hospitals. Also co-morbid conditions may be the cause of referral.

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**How to cite this article:** Patro JP. Clinical Profile of Hypertensive Patients Attending a Teaching Hospital in Hyderabad. Ann. Int. Med. Den. Res. 2016; 2(6):ME86-ME87.

**Source of Support:** Nil, **Conflict of Interest:** None declared