

# A Clinical Study on Non-Symptomatic Hypertension in South India.

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## ABSTRACT

**Background:** Hypertension is currently becoming a major health problem in India according to survey reports prevalence of hypertension was varying from 17 – 21% in all states. Hypertension was comparatively more prevalent in executives. The Prevalence of HTN in male is 23.10% and in females 22.60%. Hypertension is defined as persistently elevated blood pressure exceeding 140/90mm of Hg i.e. systolic BP > 140mm diastolic BP > 90mm hg. Aim of Study: To assess the prevalence of hypertension in Andhra Pradesh and Telangana states. **Methods** We have conducted this study on 1600 subjects 220 were diagnosed as hypertensive blood pressure was recorded 2 times and all the guide line by WHO were followed. **Result:** We have examined 1600 subjects out of 1600, 240 were diagnosed as hypertension males were 132, females were 98. **Conclusion:** Hypertension is more prone to cause coronary artery disease and stroke. To prevent this mortality a screening programme is essential at national and international level.

**Keywords:** Hypertension, Prevalence, systolic blood pressure diastolic blood pressure, coronary artery disease.

## INTRODUCTION

According to world health organization hypertension is defined as persistent elevated systolic BP > 140 mm hg and diastolic BP > 90mm of Hg. Stage I hypertension is called when systolic BP is between 140 – 159 mmHg and Diastolic BP between 90 – 99 mmHg and stage II is called when Systolic BP is greater than 160 and diastolic BP is greater than 100mmHg CMDT – 2016.<sup>[3]</sup>

The Prevalence of hypertension increases with age and is more common in blacks than whites and it is one of the most important non-communicable diseases.

According to WHO study appropriate 40% of people above 25 years had hypertension in 2008. Hypertension is a major public health problem in developing countries.<sup>[4,5]</sup> The uncontrolled hypertension in public was increased between 1980 and 2008. High blood pressure is causing about 7.5 million deaths per year worldwide 47% of coronary artery diseases and 54% of stroke were due to hypertension worldwide.<sup>[6,7]</sup> Hypertension is usually associated with chronic kidney disease, blindness, in the

form of retinal hemorrhages, intracerebral bleeding and coronary artery disease. The south-east Asian region showed studies reporting that hypertension is an important risk factor for the burden of disease in this region.<sup>[9,10]</sup> Studies about the development of national and local health policies for prevention and control of hypertension. The government of India health and family welfare department had launched the national program for prevention and control of Diabetes, cancer, hypertension, heart disease and stroke. A number of environmental factors have been implicated in the development of hypertension including salt intake, obesity, occupation, alcohol intake, family size and crowding.<sup>[11]</sup> (Harrison's principle of medicine -18th Ed.)

**Aims and Objectives:** To assess the prevalence of hypertension in Telangana and Andhra Pradesh.

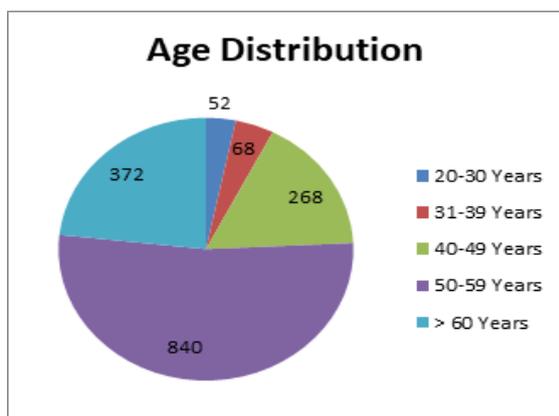
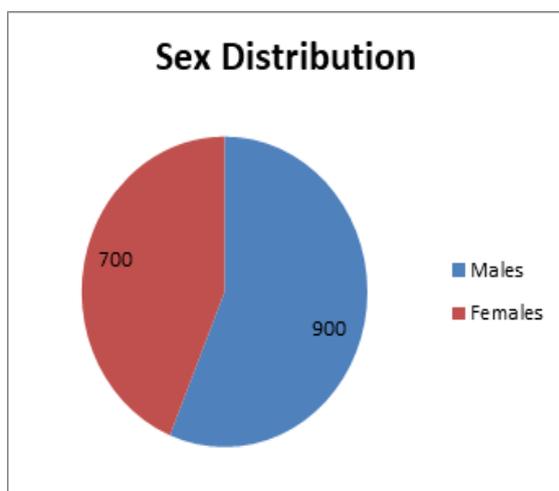
## MATERIALS AND METHODS

In our study we have recorded blood pressure in 1600 subjects. We have recorded blood pressure 2 times separately by manual method (Sphygmomanometer). Male were 700 and females were 900. Age group included was 20 years to 60 years. For all subjects BP was recorded on separate occasions. In sitting positions and after giving sufficient time for relaxation. The subjects who were alcoholics and smokers were excluded in this study. Those who were on drugs were also excluded.

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Subjects with systolic blood pressure more than 140 mmhg and diastolic blood pressure more than 90 mm of hg were considered as hypertensive. Finally data was collected by qualified medical personal.



### RESULTS

We examined total number of 1600 subjects out of 1600 subjects 240 were having hypertension the prevalence ratio is (15%) out of 240 hypertensive patients males were 132 and females were 98.

**Table 1: Total No of Subjects.**

Males	Females	Total
900	700	1600

**Table 2: Age.**

S. No	Age Group	Male	Female	Total
1	20-30 Years	34	28	52
2	31-39 Years	38	30	68
3	40-49 Years	146	122	268
4	50-60 Years	430	410	840
5	>60 Years	190	172	370

**Table 3: Total No. of patients with hypertension.**

Male	Female	Total
135	98	240

### DISCUSSION

Hypertension is major public health problem in developed countries and developing countries also studies in developing countries is shows that 50% of hypertensive patients were not diagnosed. Hypertension has become one of the major risk factor for the development of coronary artery disease and stroke. Most of the times it is asymptomatic so early detection of hypertension is necessary to prevent morbidity and mortality. For That periodical recording of blood pressure is necessary. Patients with high blood pressure is also sometimes unaware. The complication like coronary artery disease, Actue heart failure cerebral haemorstage and cerebral infection chronic kidney disease and regionally very common with unconditional.

In our study the prevalence of hypertension is 15.2% with slight predominance of males which is nearer to other national and international studies. Studies shows that control of hypertension is depends on geographic and social economic status. The awareness of hypertension in unite states is 72% and in Australia is 62% (1.2) Where as in Southeast Asia it is very low because of illiteracy. More than 1 billion population is having hypertension more than 140/90mm of Hg worldwide and by2025 it is going to increase up to 1.56 billion.

In India more than 70% of all hypertensive patients are unaware according to national health survey. Some studies show that some physicians some times and diagnosis and some times over diagnose and sometimes to under treat high blood pressure.<sup>[7]</sup> Govt of India conducted national health survey. According to that survey, Hypertension is present in 33% of adults who are more than 45years of age. Several studies shows that only 50% of the people with hypertension were diagnosed and that only half those diagnosed were ever treated so only about 12.5% of hypertension patients were adeqetaly treated. In our study the prevalence is higher in 36% obesity sedentary lifestyles, lack of exercise are attributed to the high prevalence of hypertension in India and worldwide.

### CONCLUSION

Hypertension is more prone to develop coronary artery disease and stroke. Even though prevalence is high major bulk is still undiagnosed. To prevent these mortality and mobility conditions and a screening and preventive program is needs to be established at national and international level. Life styles modifications and dietary habits (salt restriction < 606gr/day) should be taught from school and college level.

## REFERENCES

1. Govt of india 2011 national health report ministry of health and family welfare.
2. park text book of preventive social medicine 23rd ed. According to WHO report -2012.
3. Gupta R. Guptha S Strategies for initial management of hypertension Indian J Med Res Nov 2010;132(5) 531-542
4. Gupta R. al Odat NA, Gupta VP Hypertension epidemiology in India meta-analysis of 90 year prevalence rates and blood pressure trends. J Hum Hypertens Jul 1996;10(7) 465-472
5. Reddy KS Regional case studies-India Nestle Nutr, Workshop SerPediatri Program 2009,6315-24, discussion 41-16. 259-268
6. Mohan V. Dome M. Farooq 8, Datta M Deepa R Prevalence, awareness and control of hypertension in Chennai-The Chemist Urban Rural Epidemiology Study (CURES-52) J Assoc Physicians India May 2007,55 326-332
7. Enas EA. Singh V Gupta R. Pat. R et al Recommendations of the Second Indo-US Health Summit for the prevention and control of cardiovascular disease among Asian Indians Indian heart puma' 2009 61 265-74
8. Enas EA. Singh V Munjal YP, Bhandari S Yadave RD Manchanda SC Reducing the burden of coronary artery disease in India challenges and opportunities Indian Heart J Mar-Apr 2008,60(2) 161-175
9. Enas EA How to Beat the Heart Disease Epidemic among South Asians A Prevention and Management Guide for Asian Indians and their Doctors Downers Grove Advanced Heart Lipid Clinic USA 2011
10. Joshi SR. Saboo B, Vadivale M, et al Prevalence of Diagnosed and Undiagnosed Diabetes and Hypertension in India-Results from the Screening India's Twin Epidemic (SITE) Study Diabetes TechnolTher Jan 2012,14(1) 8-15
11. Pearson TA Cardiovascular disease in developing countries myths, realities, and opportunities Cardiovascular drugs and therapy/ sponsored by the International Society Or Cardiovascular PharmaCootherapy. 1999,13(2) 95-104
12. Kearney PM.Whellon M. Reynolds K Global burden of hypertension: analysis of worldwide data Lancet 365(9455)217-23
13. It, Keep P, VVhelton M, Reynolds K Worldwide prevalence Of hypertension a review. J Hypertens 2004, 22(1):11-9

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