

## **Survey report of Prevalence of Hypertension in a Rural community**

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### **Abstract**

Hypertension is a global public health problem with increasing prevalence. There is limited updated information on the prevalence of hypertension in the given population. Survey based on data collected during health screening camps held at given locations in Nashik. A total of 369 patients were included in this study.

### **Keywords**

Hypertension, awareness, Prevalence

### **Introduction**

High blood pressure (BP) is ranked as the third most important risk factor for attributable burden of disease in south Asia (2010) [1]. Hypertension (HTN) exerts a substantial public health burden on cardiovascular health status and healthcare systems in India [2,3]. HTN is directly responsible for 57% of all stroke deaths and 24% of all coronary heart disease (CHD) deaths in India [4]. Hypertension is a major risk factor for a number of serious health conditions, including cardiovascular disease [5], cerebrovascular disease [6], and chronic kidney disease [7]. This study aims to provide updated data on the prevalence, awareness, treatment, and control of hypertension based on data collected during these health screening camps.

**AIM:** To study the prevalence and common risk factors of hypertension in given community.

**DATE:** 29/03/2023

**PLACE:** Hanuman Nagar, Dhruv Nagar, Shivaji Nagar Nashik

### **METHODOLOGY:**

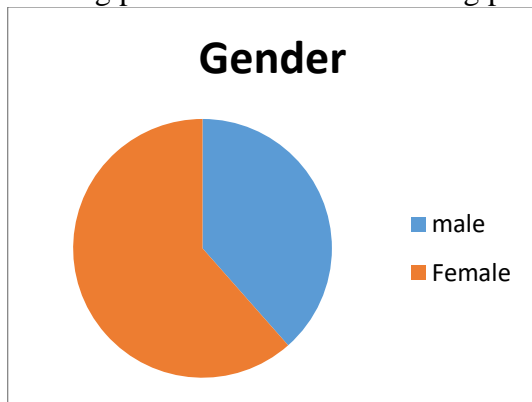
1. Screening of people was carried out under DHCS by survey method with the help of Google form.
2. Students of 4th BHMS in groups of 3 students were dispersed in DHCS selected area to interrogate with the people and their family members.
3. Initially the program was explained to each individual, consent was obtained.
4. Blood pressure measurements were performed using a mercury sphygmomanometer for patients seated for 5 min with the arm positioned at heart level. Pressures were measured using manual auscultatory technique with the appropriate sized cuff for each patient. Blood pressure was checked thrice in standing, sitting and lying down position.
5. People were advised about risk factors of Hypertension and related cardiovascular diseases.
6. People under risk groups were advised to undergo regular monitoring of blood pressure ,regular exercise and maintenance of proper diet and regimen prevent risk of hypertensive cardiovascular co morbidity prevent.

**ACTIVITIES:**

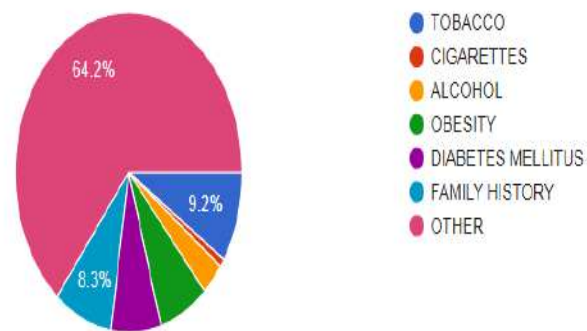
1. Initially Interrogation of targeted population above 40 years of age and individuals with risk factors of hypertension was done.
2. Overall general examination of population was done.
3. Blood pressure measurement of each individual during survey was done.
4. Dietary advice was given to the population with hypertension or individuals having the risk of hypertension

**CONCLUSION:**

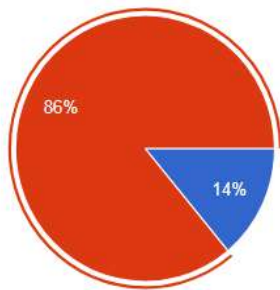
1. In a screening of the community in area total 369 responses were obtained.
2. Among the community 61.51% were female and 38.48% were male.[Diagram 1]
3. Among patients with hypertension, 85.1% were aware of having high blood pressure; 80.2% of the patients were checked their pressure regularly among these patients, 81.8% patients were having information about hypertension, 77.5% were already on treatment for hypertension.
4. Risk Factor identified during survey: Total 369 responses were with habits of alcohol (3.3%), tobacco (9.2%),Cigarette (0.8%) Obesity (7.1%) Diabetes mellitus(7.1%) family history(8.3%) others(64.2%) and [Diagram 2]
5. Among all patients 48 patients(14%) had performed blood investigation for cholesterol [Diagram 3]
6. 206 patients(55.8%) were aware of homoeopathic treatment for Hypertension [diagram 4]
7. Blood pressure was controlled in 22.5% of all patients with hypertension.
8. Among all patients total percentile of Hypertensive patients in lying down position is 8.4%,in standing position 8.13%and in sitting position 7.58%.



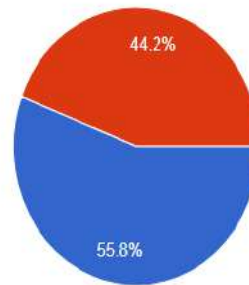
1. Male : Female



2. Risk Factors of Hypertension



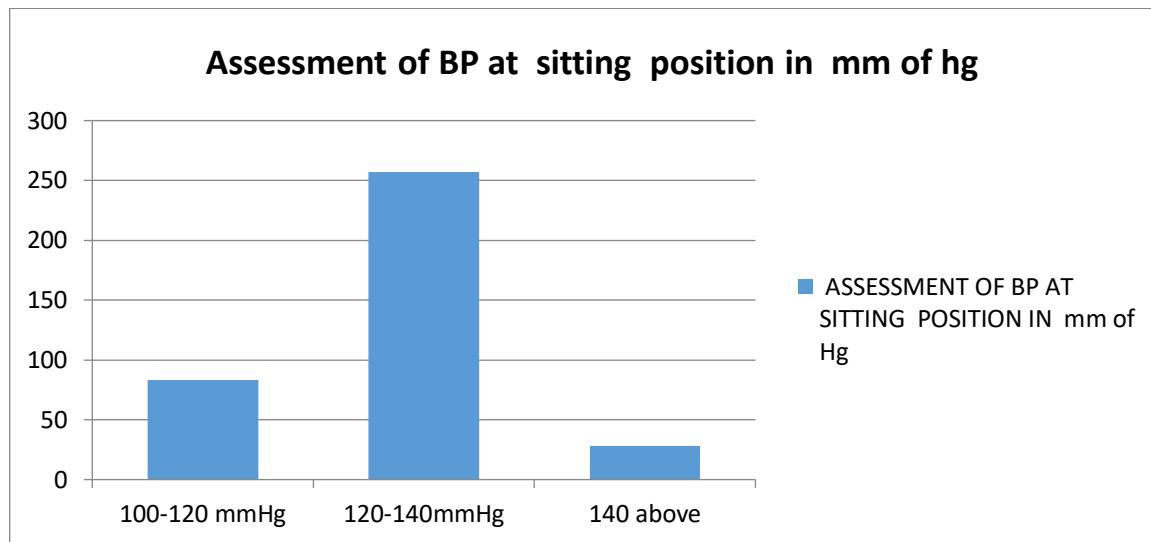
● YES  
● NO



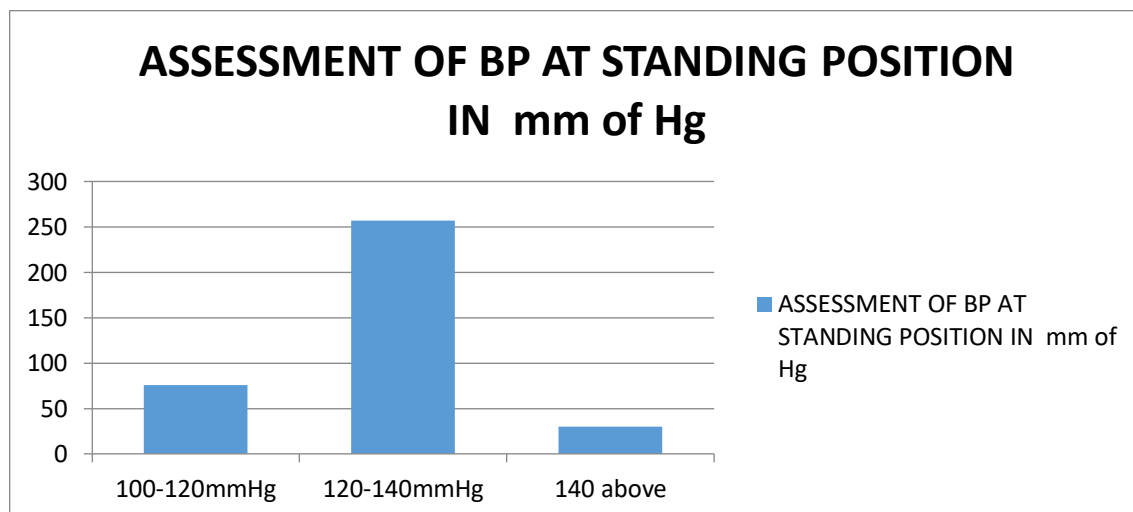
● YES  
● NO

**3. Investigation of cholesterol**

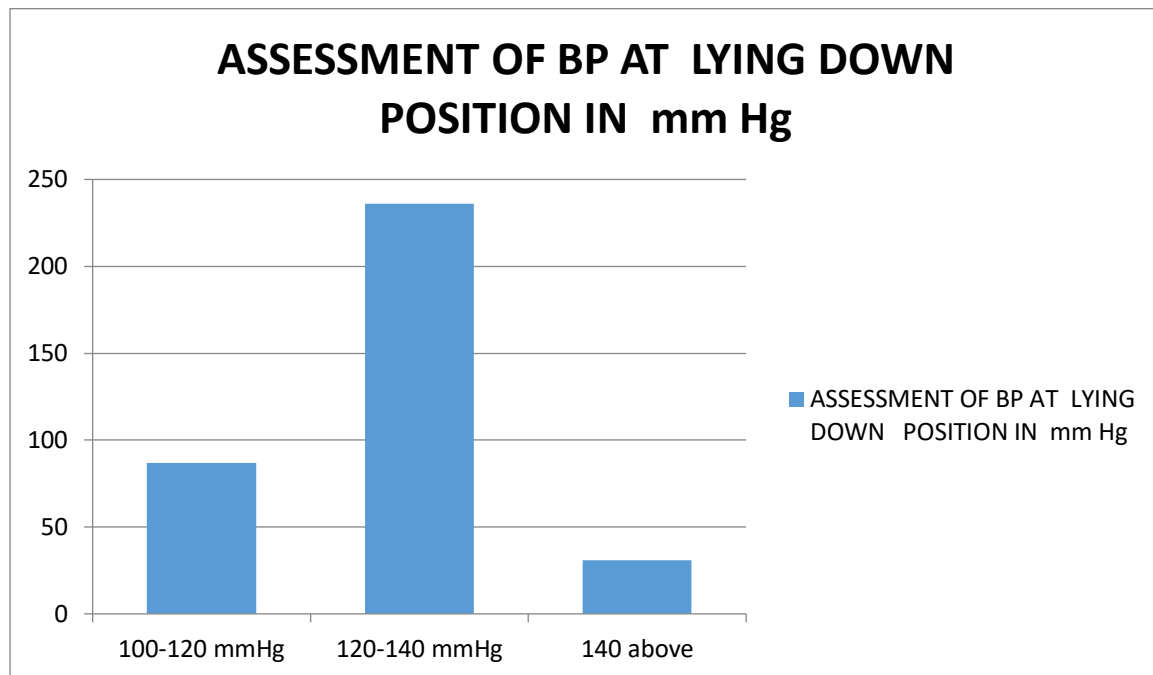
**4. Homoeopathic treatment for Hypertension**



**5. Assessment of Blood pressure in sitting position**



**6. Assessment of BP at Standing Position**



### 7. Assessment of Blood Pressure at lying down position

#### References

1. Lim SS, Vos T, Flaxman AD, Danaei G, Shibuya K, Adair-Rohani H, et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 2012; 380:2224–2260 [PMC free article] [PubMed] [Google Scholar]
2. Leeder S, Raymond S, Greenberg H, Liu H. A race against time. The challenge of cardiovascular disease in developing economies. New York: Columbia University; 2004 [Google Scholar]
3. Srinath Reddy K, Shah B, Varghese C, Ramadoss A. Responding to the threat of chronic diseases in India. *Lancet* 2005; 366:1744–1749 [PubMed] [Google Scholar]
4. Gupta R. Trends in hypertension epidemiology in India. *J Hum Hypertens* 2004; 18:73–78 [PubMed] [Google Scholar] [Ref list]
5. P.W. Wilson  
Established risk factors and coronary artery disease: the Framingham Study  
*Am J Hypertens*, 7 (1994), pp. 7S-12S
6. J.A. Staessen, R. Fagard, L. Thijs, H. Celis, G.G. Arabidze, W.H. Birkenhäger, et al.  
Randomized double-blind comparison of placebo and active treatment for older patients with isolated systolic hypertension. The Systolic Hypertension in Europe (Syst-Eur) Trial Investigators  
*Lancet*, 350 (1997), pp. 757-764
7. J. Coresh, G.L. Wei, G. McQuillan, F.L. Brancati, A.S. Levey, C. Jones, et al.  
Prevalence of high blood pressure and elevated serum creatinine level in the United States: findings from the third National Health and Nutrition Examination Survey (1988–1994)  
*Arch Intern Med*, 161 (2001), pp. 1207-1216

Geotagged Photographs of Survey

