



# INTERNATIONAL JOURNAL OF ADVANCE RESEARCH, IDEAS AND INNOVATIONS IN TECHNOLOGY

ISSN: 2454-132X

Impact factor: 4.295

(Volume 4, Issue 6)

Available online at: [www.ijariit.com](http://www.ijariit.com)

## Risk factors of hypertension

V. Senbahavalli

[shenvino2004@yahoo.co.in](mailto:shenvino2004@yahoo.co.in)

Apollo College of Nursing, Chennai, Tamil Nadu

Dr. Chidambaranathan

[drchidambaranathan\\_n@apollohospitals.com](mailto:drchidambaranathan_n@apollohospitals.com)

Apollo Hospitals, Chennai, Tamil Nadu

### ABSTRACT

*There is a high association between the demographic variables and risk factors. As a measure to find out the risk factors for hypertension this study was done among the people living in and around Ayanambakam.*

**Keywords**— Risk factors, Hypertension

### 1. INTRODUCTION

As a measure to find out the risk factors for hypertension this study was done among the people living in and around Ayanambakam. World Heart Day was founded in 2000 to inform people around the globe that heart disease and stroke are the world's leading causes of death, claiming 17.3 million lives each year. World Heart Day is an annual event which takes place on 29 September every year. Each year's celebrations have a different theme, reflecting key issues and topics relating to heart health. This year our theme is creating the heart-healthy environment.

### 2. METHODOLOGY

Together with World Heart Federation members, World Heart Day spreads the news that at least 80% of premature deaths from cardiovascular disease (CVD) could be avoided if four main risk factors – tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol – are controlled. This World Heart Day, our focus has been on creating **healthy heart environments** by ensuring that everyone has the chance to make healthy heart choices wherever they **live, work and play**, World Heart Day encourages us all to reduce our cardiovascular risk, and promotes a heart-healthy planet for those around us.

### 3. RESULTS

The present study found out the important risk factors of hypertension and its association with the demographic variables.

**Table 1: Frequency and percentage distribution of demographic variables, N = 4155**

S. no.	Demographic variable	N	P
1.	Age in years		
	18 -27	971	23.4
	28 - 37	1155	27.8
	38 - 47	947	22.8
	48 - 57	564	13.6
	>57	518	12.5
2.	Gender		
	Male	1924	46.3
	Female	2231	53.7

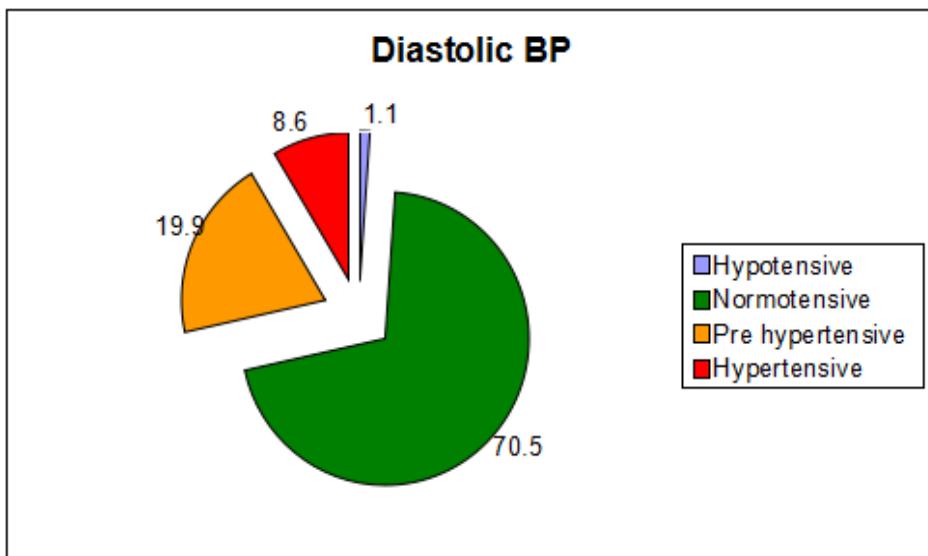


Fig. 1: Frequency Distribution of Prevalence of Hypertension (Diastolic)

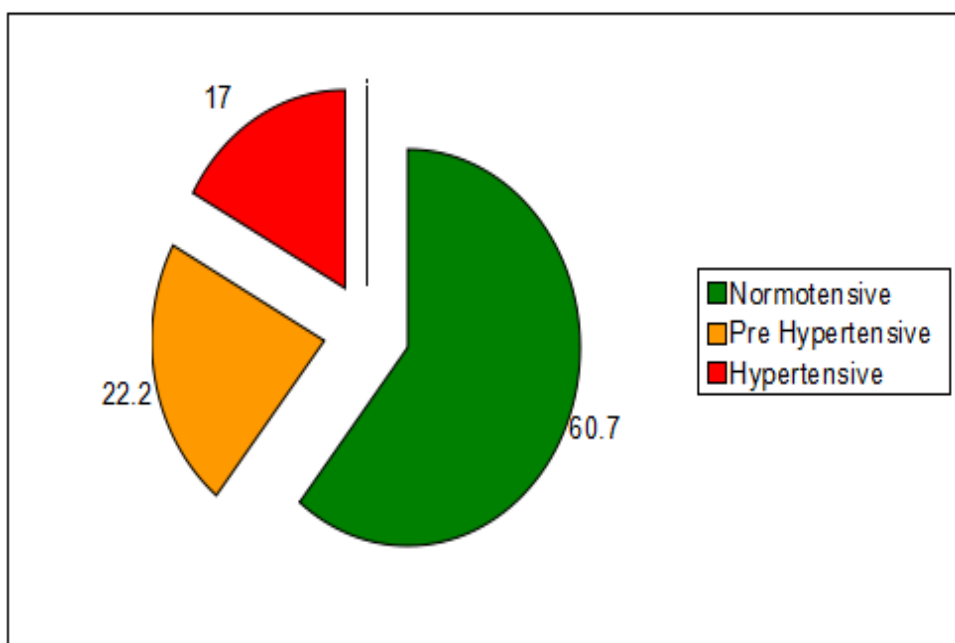


Fig. 2: Frequency Distribution of Prevalence of Hypertension (Systolic)

Table 2: Frequency and Percentage Distribution of risk factors of hypertension, N = 4155

S. No.	Clinical variable	N	P
1.	History of Diabetes Mellitus		
	Yes	428	10.3
	No	3612	86.9
	Unknown	115	2.8
2.	History of Hypertension		
	Yes	558	13.4
	No	3444	82.9
	Unknown	153	3.7
3.	History of treatment for Hypertension		
	Yes	342	8.2
	No	3770	90.8
	Unknown	43	1.0
4.	History of high cholesterol		
	Yes	137	3.3
	No	3806	91.6
	Unknown	212	5.1
5.	History of CKD		
	Yes	27	0.6
	No	4110	98.9
	Unknown	17	0.4

6.	History of Alcoholism Yes No	96 4059	2.3 97.7
7.	History of Smoking Yes No	216 3939	5.2 94.8
8.	History of Tobacco use Yes No	144 4011	3.5 96.5

**Table 3: Association between selected variables and prevalence of Hypertension, N = 4155**

Variables	Hypotensive	Normotensive	Pre Hypertensive	Hypertensive	X <sup>2</sup>
Age in years					
18 -27	13	779	135	44	<b>140.62</b> **
28 - 37	18	871	198	68	
38 - 47	5	601	228	112	
48 - 57	3	344	143	74	
>57	6	333	121	58	
Gender					
Male	12	1255	452	204	<b>62.14</b> **
Female	33	1673	373	152	
History of high cholesterol					
Yes	0	73	39	25	<b>34.72</b> **
No	40	2718	739	309	
Unknown	5	137	47	22	
History of CKD					
Yes	0	19	7	1	<b>10.3</b>
No	45	2901	812	351	
Unknown	0	7	6	4	
History of Alcoholism					
Yes	0	56	25	15	<b>10.72</b>
No	45	2871	800	341	
History of Smoking					
Yes	1	144	47	23	<b>2.85</b>
No	44	2784	778	333	
History of Tobacco use					
Yes	1	100	30	13	<b>0.34</b>
No	44	2827	795	342	

\*\* Highly significant at 0.000 level

#### 4. REFERENCES

- [1] World Health Organization. Global Health Observatory (GHO) Data: Raised Blood Pressure—Situation and Trends. 2016.
- [2] Gillespie C. D., Hurvitz K. A. Prevalence of hypertension and controlled hypertension—United States, 2007–2010. *MMWR Supplements*. 2013;62(3):144–148
- [3] Health Promotion Administration. Ministry of Health and Welfare. 2007 survey on the prevalence of hypertension, hyperglycemia and hyperlipidemia in Taiwan.
- [4] Chobanian A. V., Bakris G. L., Black H. R., et al. The seventh report of the joint national committee on prevention, detection, evaluation, and treatment of high blood pressure: the JNC 7 report. *Journal of the American Medical Association*. 2003;289(19):2560–2572
- [5] Huang Y. N., Wu T. Y., Kuo K. L., et al. Prevalence, awareness, treatment and control of hypertension and diabetes mellitus among adults participating in health examinations in Taipei city. *Taiwan Journal of Family Medicine*. 2011;21(4):157–166.