

## THE KNOWLEDGE AND AWARENESS OF HYPERTENSION IN VILLAGE RASULABAD OF WARDHA DISTRICT

Prastuti Dhande<sup>1</sup>, Jagruti N. Chaple<sup>2</sup>

<sup>1</sup>BAMS Student, MGACH &RC, Salod (H)

<sup>2</sup>Associate Professor, Department of Kriya Sharir, MGACH &RC, Salod (H), Wardha, Maharashtra, India

Email: [jagsru@yahoo.com](mailto:jagsru@yahoo.com)

### ABSTRACT

**Background:** Hypertension is a major public health burden and is part of an epidemiological transition from communicable to non communicable diseases globally. Hypertension is a major public health problem and important area of research due to its high prevalence and being major risk factor for cardiovascular diseases and other complications. It is an important risk factor for stroke, coronary heart diseases, peripheral vascular disease, heart failure, and chronic kidney disease. Tobacco and alcohol consumption, overweight, obesity, and abdominal obesity were also associated with hypertension. A cost-effective use of health services such as increasing the knowledge and awareness, detection, treatment and control of hypertension (HT) is needed among public in developing countries, particularly about the risks associated with uncontrolled blood pressure. This study was aimed at assessing the subject knowledge and awareness about hypertension. **Aim and Objectives:** The Knowledge and awareness of hypertension in village Rasulabad of Wardha District. **Materials and Methods:** This was a cross sectional descriptive and comparative study. Permission was taken from the institutional ethical committee. Data for this survey was collected by house to house visit using a structured questionnaire through interviewing and observation during Community Health Check Program from Mahatma Gandhi Ayurveda College Hospital and Research Centre (DMIMS) and blood pressure was measured prospectively. **Result and Observation:** The knowledge and awareness of hypertension were tested among 100 subjects with validated questionnaires. 13% people were having the knowledge about normal values of hypertension. Out of 100 subjects 24% were found hypertensive and out of those 24 people 12 people were aware about it rest were unaware. **Conclusion:** These results suggest that, although general knowledge and awareness of hypertension is adequate upto certain limits, but patients do not have a comprehensive understanding of this condition. Hence it is urgent necessity to promote knowledge, awareness and health literacy among the rural areas. An opportunity exists to focus patient education programs and interventions on cardiovascular risk associated with uncontrolled hypertension.

**Keywords:** Hypertension, Knowledge, Awareness, Coronary heart diseases.

### INTRODUCTION

Hypertension is one of the most common and important cardiovascular risk factors, and may account for about 30% of cardiovascular diseases. Hypertension is a major public health burden and is part of an epidemiological transition from communicable to non communicable diseases globally. It is an important risk factor for stroke, coronary heart diseases, peripheral vascular disease, heart failure, and chronic kidney disease [1]. The aging, urbanization, sedentary lifestyle, obesity, ethanol consumption, and excess salt intake are the contributing factors for epidemiological transition of hypertension in world [2]. A cost-effective use of health services such as increasing the knowledge and awareness, detection, treatment, and control of hypertension (HT) is needed among public in developing countries, particularly about the risks associated with uncontrolled blood pressure [3]. Screening for elevated systolic blood pressure (SBP) has been identified as an important medical challenge in the prevention and treatment of hypertension [4]. Hypertension affects approximately one billion individuals worldwide [5]. Hypertension is an important global health challenge because of its high prevalence and resulting cardiovascular disease and chronic kidney disease [6-7]. Hypertension is the leading preventable risk factor for premature death and disability worldwide [7].

To obtain an up-to-date picture of the worldwide situation, it is important to assemble more recent data and to quantify differences between world regions. The aim of this study is to assess Knowledge and awareness of hypertension in village Rasulabad of Wardha district. The basic aim behind conducting this study in rural areas was that the knowledge and awareness in rural areas about hypertension is less compared to that of urban areas.

**AIM:** To assess the Knowledge and awareness of hypertension in village Rasulabad of Wardha district.

**OBJECTIVE:**

1) To study of knowledge of hypertension in village Rasulabad.

2) To create awareness of hypertension in village Rasulabad.

**Material and Methods**

**Study design**

The study will be cross sectional study. Permission was taken from the institutional ethical committee. Data was collected in village Rasulabad of Wardha District by personal interviews and blood pressure was measured prospectively. All the subjects were personally interviewed on the basis of questionnaire from July 2018 to January 2019. Hypertension was diagnosed with values of SBP/DBP > 140/90 mmHg, measured by a standard mercury sphygmomanometer in at least two occasions using standardized methods. Questionnaires administered by an interviewer are used to survey socio demographic factors, lifestyle-related risk factors and knowledge and awareness about hypertension. Before interviewing the verbal consent of the subject was taken. Data was analysed statistically by simple proportions.

**Type of Study and Ethical clearance:**

The study was cross sectional study. Permission was obtained from the institutional ethical committee Datta Meghe Institute of Medical Sciences (Deemed to be University). on date 07.07.2018 with Ref.No. DMIMS (DU)/IEC/2018-19/7326.

**Duration of study**

The study was conducted once in a month for 7 months during July 2018 to January 2019.

**Inclusion criteria**

All the persons above 30 years who were willing to give their consent.

**Exclusion criteria**

Subjects below 30 years and those who were unwilling to participate in the study.

**Sample size**

Study was conducted among 100 subjects.

**OBSERVATION AND RESULT**

Total 100 subjects participated in the study, 53 were males and 47 were female subjects (Table 1). In the present study subjects were above 30years. 13% subjects were found to have knowledge about hypertension. 24% subjects were found to have hypertension out of which 54% subjects were aware

of having hypertension. 30% subjects were having knowledge about the life threatening consequences of hypertension.

**Table 1:** Age wise distribution of subjects

Age	% of subjects
30-39 years	22%
40-49 years	22%
50-59 years	25%
60-69 years	21%
Above 70	10%

In **Table 1** age wise % of subjects is shown out of which 22% belongs to 30-39yrs age group, 22% belongs to 40-49yrs age group, 25% belongs to 50-59yrs age group, 21% belongs to 60-69yrs age group and rest 10% belongs to above 70yrs age group. It was observed that the hypertensive patients belonged to the age group above 60 years.

**Table 2:** Sex wise distribution of subjects

Sex	% of subjects
Males	53%
Females	47%

In **Table 2** Sex wise distributions of subjects is shown where, 53% were male subjects and 47% are female subjects. Most of the hypertensive patients were males.

**Table 3:** Weight wise distribution

Weight	% of subjects
Less than 50kg	25%
50-59kg	32%
60-69kg	27%
70-79kg	10%
Above 80kg	6%

In **Table 3** weight wise distributions is done where, 25% subjects are less than 50kg, 32% are between 50-59kg, 27% are between 60-69kg, 10% between 70-79kg and rest 6% are above 80kg. Those who were above 70kg were found to have hypertension.

**Table 4:** Occupation wise distribution

Occupation	% of subjects
Labourers	10%
Farmers	48%
Housewives	29%
Others	13%

In **Table 4** occupation wise distribution is done, here 10% are labourers, 48% are farmers, 29% females are housewives, and 13% does other jobs like business, shopkeepers etc. Most of the hypertensive patients belonged to the category of labourers as the workload is higher in them.

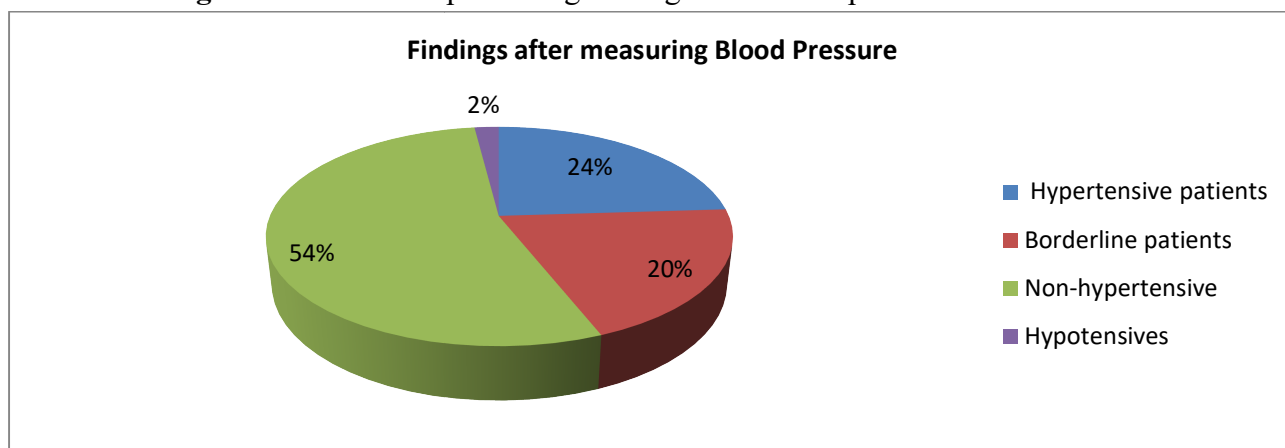
**Table 5:** Education wise distribution

Education	% of subjects
Illiterate	15%
1 <sup>st</sup> -10 <sup>th</sup>	59%
12 <sup>th</sup> pass	20%
undergraduates	6%

In **Table 5** education wise distribution is done where, 15% subjects are found illiterate, 59% are who gained primary education, 20% had completed secondary education and the rest 6% were undergraduate

## KNOWLEDGE AND AWARENESS OF HYPERTENSION

The knowledge and awareness of hypertension were tested among 100 subjects with validated questionnaires and results were shown in Tables 6 & 7 respectively. 13% subjects had adequate knowledge about hypertension however 87% subjects had minimum knowledge about hypertension. 24% subjects were found hypertensive out of them 46% subjects were unaware of having hypertension. 12.5% hypertensive patients were unaware of their values of blood pressure at the time of their last visit. 20% of hypertensive patients had awareness of target organ damage due to hypertension. 22% subjects thought that taking medicine is key to control the blood pressure.

**Figure 1:** Pie chart representing findings after blood pressure measurement**Table 6:** Patient's knowledge of hypertension

Questions	Yes %	No%
1. Knowing normal values of BP as 120/80mmhg	13%	87%
2. Increase in BP >140/90mmhg	8%	92%
3. HTN can progress along with the age	33%	67%
4. Both sexes have equal chances of developing HTN	44%	56%
5. Thinking HTN as a treatable condition	42%	58%
6. Risk of developing HTN if there is a family history	26%	74%
7. Thinking that aging is a greater risk for HTN	35%	65%
8. Thinking that Smoking is a risk factor for HTN	19%	81%
9. Eating fatty foods is a risk factor for HTN	41%	59%
10. Overweight is a risk factor for HTN	43%	57%
11. Regular physical exercise reduces HTN	51%	49%
12. More salt consumption increases BP	36%	64%
13. Medication alone controls HTN	22%	78%
14. HTN can lead to life threatening condition	30%	70%

**Table 7:** Awareness of hypertension amongst 24 hypertensive patients found

Questions	Yes	No
1. Aware about having HTN	13 (54%)	11(46%)
2. Knowing blood pressure values in diagnosing as HTN	5(21%)	19(79%)
3. Knowing target blood pressure values	1(4%)	23(96%)
4. Controlling of blood pressure reduces your complications	10(41%)	14(59%)
5. Uncontrolled hypertension can lead to organs damage	5(21%)	19(79%)
6. Knowing values of blood pressure at recent visit	3(12%)	21(88%)
7. Thinking HTN as curable condition?	8(33%)	16(67%)
8. Changing your lifestyles helps to lower your blood pressure	9(38%)	15(62%)
9. Improvement of your blood pressure over last 12 months	4(16%)	20(84%)
10. Any remedial measure used if hypertensive	1(4%)	23(96%)

## DISCUSSION

Hypertension or high blood pressure is a common condition that will catch up with most people who live into older age. This study is conducted to understand the current status of knowledge and awareness of hypertension in rural areas. Our results suggest that subjects are not much knowledgeable about hypertension and about its specific factors and specifically their own level of blood pressure control. 13% subjects had adequate knowledge about hypertension however 87% subjects had minimum knowledge about hypertension. 24% subjects were found hypertensive out of them 46% subjects were unaware of having hypertension.

In one of the study conducted in Northern Sri Lanka most patients (69.9%) had adequate knowledge about hypertension. Almost all patients were aware of their hypertension with 86.1% reporting that a doctor or healthcare provider had told them they have hypertension. But most patients (40.5%) were unaware of their current status of their disease<sup>[8]</sup>. In this study it's been seen that the knowledge and awareness has been increased amongst people whereas in our study the knowledge as well as awareness is less in the rural people.

In one more such study conducted people were found knowledgeable about hypertension, 91% patients were aware of their hypertension and reported doctors or health care provider. Nearly 70% patients knew that high blood pressure can lead to congestive heart failure<sup>[9]</sup>. In our study 30% subjects had knowledge about the life threatening consequences of hypertension like congestive cardiac failure so these results are totally opposite in rural areas. As most of the Indian population in rural areas is illiterate and it was observed that in our study illiteracy was more. So there is need to plan and implement new strategies for educating young generation particularly in villages who are at the lower education levels. It is needed to change some lifestyles and following healthy living habits, avoid smoking and alcohol, low sodium intake, low fat and high fibre diet, fruits and green vegetables, proper physical exercise, aerobics, healthy weight,

regular pulse and BP check, reduce stress, low bad cholesterol level, healthy family history etc.

## CONCLUSION

The subjects didn't have adequate knowledge and awareness about Hypertension. Such less knowledge is not said to be helpful in preventing hypertension. The different programs in urban areas had increased the knowledge of people in cities but the rural areas are still very behind. Hence there is an urgent need of spreading the knowledge about hypertension in rural areas and make people aware of their disease conditions. More and more similar studies targeted at general public particularly in rural areas are needed at regular intervals. Education programs intend not only to raise the awareness of hypertension, but also of factors contributing to an increase in the incidence of hypertension and ways to prevent it. Awareness campaign is aimed at educating people to know their blood pressure numbers and to take preventive measures in case of hypertension.

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