# TO ASSESS THE KNOWLEDGE OF HYPERTENSION AMONG HYPERTENSIVE PEOPLE 

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#### Abstract

: BACKGROUND: Hypertension is the silent killer disease of today and the single most important predictor of cardiovascular risk. High blood pressure is responsible for 7.6 million deaths per annum worldwide. Around $54 \%$ of stroke and $47 \%$ of coronary heart disease are attributable to high blood pressure. This study was aimed at assessing the knowledge of hypertension among hypertensive people. AIM AND OBJECTIVE: The knowledge of hypertension among hypertensive people MATERIALS AND METHODS: This was a questionnaire study to assess the knowledge on hypertension. The permission was obtained from the institutional ethical committee. The data was collected with the help of standard questionnaire among 200 hypertensive patients. Data like Sociodemographic profiles which includes age, gender, BMI status, personal habits, health profile, comorbid status and level of knowledge on hypertension were collected. All of these were collected only after getting an informed consent. RESULT AND OBSERVATION: The knowledge of hypertension was tested among 200 hypertensive people with structured questionnaire. $58 \%$ people were having knowledge about the normal values of hypertension. Out of 200 hypertensive people $70 \%$ of the study population have adequate knowledge about hypertension while $30 \%$ had minimum knowledge about hypertension. CONCLUSION: These results suggest that the participants had partial knowledge about hypertension even though they were unaware of hereditary illness. Through this study the minimum knowledgeable subjects were able to know about normal range, causes, complications, lifestyle management and methods to control hypertension.


## KEYWORDS: Hypertension, Hypertensive people, Knowledge, Medications

## 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 diseases. ${ }^{(1)}$ Hypertension and its complications have a large economic impact, both at household and macroeconomic level, due to catastrophic healthcare expenditures and through loss of income and labour productivity. Although the exact causes and mechanisms of hypertension remain unknown, it is generally believed that the levels of blood pressure and the prevalence of hypertension are determined by multiple environmental factors such as poor diet ${ }^{(2)}$, more sodium intake cigarette smoking, mental work, physical inactivity, overweight and obesity, and excessive alcohol consumption, as well as genetic factors, and their interactions. ${ }^{(3)}$ Hypertension is an important global health challenge because of its high prevalence and resulting cardiovascular disease and chronic kidney disease. ${ }^{(4)}$ Hypertension is the leading preventable risk factor for premature death and disability worldwide. ${ }^{(5)}$
Under the new 2020 guidelines, all blood pressure measurements over $120 / 80 \mathrm{mmHg}$ are considered elevated. Hypertension has been referred to as a "silent killer". By 2020, studies indicate that mortality by cardiovascular diseases is expected to increase by $120 \%$ for women and $137 \%$ for men. ${ }^{(6)}$ To obtain an up-to-date picture of the worldwide situation, it is important to assemble more recent data and to quantity differences between world regions. The aim of this study is to assess Knowledge of hypertension among hypertensive people. The basic aim behind conducting this study is to develop knowledge on hypertension in order to reduce life threatening conditions. Through this study the minimum knowledgeable subjects were able to know about normal range, causes, complications, lifestyle management and methods to control hypertension.

AIM: To assess the knowledge of hypertensionamonghypertensive people
OBJECTIVE: To study the knowledge of hypertension among hypertensive people.

## MATERIALS AND METHODS:

The data was collected with the help of standard questionnaire among 200 hypertensive patients. Data like Socio-demographic profiles which includes age, gender, BMI status, personal habits, health profile, co morbid status and level of knowledge on hypertension were collected.
All of these were collected only after getting an Approval from institutional Ethical committee in
Dr.M.G.R Educational \& Research Institute. The informed consent was obtained from all participants Data was analysed statistically by simple proportions.
SOURCES : Not Appilicable
SAMPLE SIZE: 200 Hypertensive people.

## INCLUSION CRITERIA

- Patient diagnosed with essential hypertension.
- Age above 18 years
- Patients of either sex

EXCLUSION CRITERIA

- Pregnancy Induced Hypertension
- Chronic Kidney disease


## RESULT

Total 200 subjects were participated in the study. Out of 200 participants, 106 were females and 94 were males (Table1). $70 \%$ subjects were found to have knowledge about hypertension. $68 \%$ subjects were having knowledge about the life threatening consequences of hypertension.

Table 1: Age wise distribution of subjects

| AGE | PERCENTAGE |
| :---: | :---: |
| $20-29$ Years | $1 \%$ |
| $30-39$ years | $25 \%$ |
| $40-49$ years | $18 \%$ |
| $50-59$ years | $22 \%$ |
| $60-69$ years | $21 \%$ |
| Above 70 | $12 \%$ |

In Table 1 age wise \% of subjects is shown out, of which, $25 \%$ belongs to $30-39$ yrs age group, $18 \%$ belongs to $40-49 \mathrm{yrs}$ age group, $22 \%$ belongs to $50-59 \mathrm{yrs}$ age group, $21 \%$ belongs to $60-69 \mathrm{yrs}$ age group and rest $12 \%$ belongs to above 70 yrs age group.

Table 2: Gender wise distribution of subjects

| GENDER | PERCENTAGE |
| :---: | :---: |
| Male | $47 \%$ |
| Female | $53 \%$ |

In Table 2 gender wise distributions of subjects are shown where, $47 \%$ were male subjects and $53 \%$ are female subjects. Most of the hypertensive patients were female.

## Distribution of subjects according to BMI


$\square$ Underweight
Normal
Overweight
Obese class I
Obese class II
Obese class III

Figure 1: Pie chart representing distribution bases on BMI status.
Table 3: Distribution of subjects according to Educational Qualification

| EDUCATIONAL <br> QUALIFICATION | PERCENTAGE |
| :---: | :---: |
| Educated | $62 \%$ |
| Uneducated | $38 \%$ |

In Table 3 education wise distributionsare done where, $62 \%$ were educated and $38 \%$ were uneducated.

## KNOWLEDGE OF HYPERTENSION

The knowledge of hypertension was tested among 200 subjects with validated questionnaires and results were shown in Tables 4. 70\% subjects had adequate knowledge about hypertension however $30 \%$ subjects had minimum knowledge about hypertension. $55 \%$ of hypertensive patients are knowledgeable about normal values of blood pressure, $73 \%$ knows that both sexes have equal chances of developing hypertension, $86 \%$ knows the causes of hypertension, $80 \%$ knows that obese people are more prone to heart disease due to hypertension. $69 \%$ knows that more salt consumption increases blood pressure, $67 \%$ knows that life style modification helps to reduce blood pressure.


Figure 2: -Distribution of subjects based on knowledge of risk factors of personal habits.


Figure 3: Distribution of subjects with Regular check-up and Medication

Table 4: Patient's knowledge on hypertension

| Sl. <br> No | QUESTIONS | Yes <br> $(\%)$ | No (\%) |
| :---: | :---: | :---: | :---: |


| 1. | Aware about the term 'Hypertension' | $55 \%$ | $45 \%$ |
| :---: | :--- | :---: | :---: |
| 2. | Knowing normal range of BP as $120 / 80 \mathrm{~mm} \mathrm{Hg}$ | $58 \%$ | $42 \%$ |
| 3. | Knowing BP values while diagnosing HTN | $78 \%$ | $22 \%$ |
| 4. | Knowing BP value in recent visits | $82 \%$ | $18 \%$ |
| 5. | Both sexes have equal chances of developing HTN | $73 \%$ | $27 \%$ |
| 6. | Regular exercise reduces HTN | $56 \%$ | $44 \%$ |
| 7. | Knowing the causes of hypertension | $86 \%$ | $14 \%$ |
| 8. | Knowing that controlling of BP reduces its complication | $48 \%$ | $52 \%$ |
| 9. | Increased risk of developing HTN if there is a family history | $69 \%$ | $31 \%$ |
| 10. | Aware about more salt intake increases BP | $67 \%$ | $33 \%$ |
| 11. | Lifestyle modification reduces HTN | $72 \%$ | $28 \%$ |
| 12. | Thinking HTN as curable condition | $68 \%$ | $32 \%$ |
| 13. | HTN can lead to life threatening condition | $70 \%$ | $30 \%$ |
| 14. | Aware about the complications of HTN | $20 \%$ | $20 \%$ |
| 15. | Knowing the obese people are more prone to heart diseases due to hypertension |  |  |

## 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 of hypertension among hypertensive patients. Our results suggest that participants are aware of their hypertensive condition. From the study $70 \%$ participants have adequate knowledge about hypertension and $30 \%$ have minimum knowledge about hypertension
Regarding Educational status $62 \%$ (123) were educated and $38 \%$ (77) were uneducated. With regarding to family history $44 \%$ (89) of participants were reported with a known history of hereditary illness and $52 \%$ (104) of them were without history of hereditary illness. A recent study says that family history of hypertension is nearly 1.4 times more likely to develop hypertension than those without a family history. ${ }^{(7)}$
Considering personnel habits $43.5 \%$ (87) were teetotalers, $21 \%$ (43) are alcoholic, $14 \%$ (27) are smokers and $5 \%$ (11) are tobacco users. Regarding the regularity of checkups $85 \%$ of educated participants were on regular check up and77\% of uneducated participants went for regular checkups. $93 \%$ of participants going for regular checkups were under regular medication while $27 \%$ of participants were taking medication even though they were not under regular checkups. A study conducted in Sudanese people shows that only $20 \%$ of the participants went for regular check-ups / monitored their BP at home and $14 \%$ did not change their habits to achieve suitable pressure levels and $34 \%$ did not visit doctors on a regular basis.(8)
The knowledge of hypertension was assessed among 200 hypertensive people with a standard questionnaire and the result shows that about $55 \%$ of hypertensive patients are knowledgeable about normal values of blood pressure, $73 \%$ knows that both sexes have equal chances of developing hypertension, $86 \%$ knows the causes of hypertension, $80 \%$ knows that obese people are more prone to heart disease due to hypertension. $69 \%$ knows that more salt consumption increases blood pressure, $67 \%$ knows that life style modification helps to reduce blood pressure.

## CONCLUSION

It is evident that hypertension is a common health problem in our country but it has been well acknowledged to control its affect. In our study, it's been seen that knowledge has been increased partially among hypertensive people. In a developing country like India different health care programs not only helps to create awareness of hypertension, but also factors contributing to an increase in incidents of hypertension and ways to prevent it. The result shows that $70 \%$ of people had adequate knowledge about their hypertensive condition.
The participants had partial knowledge about hypertension even though they were unaware of hereditary illness. Through this study the minimum knowledgeable subjects were able to know about normal range, causes, complications, lifestyle management and methods to control hypertension.

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