# Oriqinal sficicle Frequency of Hypertension among the Patients Attending Medical Outdoor at B.V.H, Bahawalpur 

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#### Abstract

Objective: The purpose of the research was to find the incidence of hypertension in the patients visiting Medical OPD at B.V.H, Bahawalpur. Study Design: Observational / descriptive / cross sectional study. Place and Duration of Study: This study was conducted at Medical OPD, B.V.H, and Bahawalpur from 05 January 2016 to 05 April 2016. Materials and Methods: The data was collected through a pre-formed questionnaire about knowledge of patients regarding hypertension. Data was entered and analyzed using SPSS 17. All result was presented in percentages, frequencies, and tables. Results: Three hundred and thirty-two patients were examined during the study period with the age of 20 to 60 and above years. Among the study sample, 147(44\%) were males and 185(56\%) females. Maximum hypertensive patients $54(16.3 \%$ ) were found among the age group of 41-50 years. Hypertension was found to be present in $57.6 \%$ males and $47.6 \%$ female having normal BMI. Most common factors associated with the presence of hypertension in our study population were "smoking", "use of ghee "and " lack of exercise". 22.5 percent of our male population smoke regularly and $39.5 \%$ female were in habit of using ghee daily. 95 ( $26.7 \%$ ) hypertensive females and $61(21 \%)$ hypertensive males among our study population were having a family history of hypertension. Out of total type A population, $70(49.3 \%)$ were found to be hypertensive. Conclusion: In the present study, the frequency of hypertension in medical OPD patients was very high, (as 47 \% of our study population was suffering from it). Most of the patients were in 41-50 years age group.


Key Words: Frequency; Hypertension; BMI.
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## INTRODUCTION

Hypertension is most important cause of vascularillnesses and avital cause of morbidity and mortality and associated with many heart diseases. ${ }^{1}$ It is one of the non-communicable diseases putting a large of burden in evolving Countries that already facing a lot of infectious disease . ${ }^{2-4}$
According to National Health Survey one in three Individual above 45 years of age facing hypertension. ${ }^{5}$ National Health Survey (NHS) revealed $17 \%$ prevalence of risk factors for cardiac diseases in Pakistan. ${ }^{6}$ This dangerous and alarming condition emphasizing us, we must shift from curative to preventive approach.

[^0]Therefore early finding of disease, proper medication and Limitation of Blood pressure in normal range are the important constituents of the cohesive management of coronary heart diseases.
Hypertension can affect organs like heart, brain, kidneys and blood vessels resulting in vascular diseases. ${ }^{7}$ Increase in Blood Pressure causes CVA and Heart diseases approximately $2 / 3^{\text {rd }}$ of CVA and $1 / 2$ of ischemic heart diseases. All measures of B.P are directly associated with the risk of CAD and CVA, only systolic blood pressure is important interpreter of circulatory events. ${ }^{8}$
According to the data from WHO and others, hypertension is an evolving health crises in the emergent countries. ${ }^{9}$ It was expected that from 19902020, due to increased incidence of hypertension, CVA mortality will be more in the evolving countries as paralleled to the industrialized countries. ${ }^{10}$ Worldwide, Indo-Asian people are at highest threat for cardiovascular disease. ${ }^{11}$ About $80 \%$ of the overall cardiovascular disease is in the evolving countries.
Hypertension is the major cause of cardiovascular disease and CVA in Pakistan determine the frequency of hypertension in patients in this study.

## MATERIALS AND METHODS

The data was collected from 05 January 2016-05 April 2016 in Medical OPD, B.V.H Bahawalpur. After vocal permission conversation made with the patients. All the willing patients attending OPD included and Debilitated and unwilling patients excluded from our study. The conversation made with the patients by one of the researchers and predesigned questionnaire was used to collect data. The conversation made with the patients in different languages like English, Urdu and with local language of the patients area. Data analyses was done by using SPSS 17.

## RESULTS

Three hundred and thirty-two patients were examined during the study period with the age of 20 to 60 and above years. Among the study sample, $147(44 \%)$ were males and $185(56 \%)$ females.

Maximum hypertensive patients $54(16.3 \%)$ were found among the age group of 41-50 years. (Table 1).
Hypertension was found to be present in $57.6 \%$ males and $47.6 \%$ female having normal BMI. Most common factors associated with the presence of hypertension in our study population were "smoking", "use of ghee "and "lack of exercise". (Table 2,3,4) 22.5 percent of our male population smoke regularly and $39.5 \%$ female were in habit of using ghee daily. \{Table 4).
95 ( $26.7 \%$ ) hypertensive females and 61 ( $21 \%$ ) hypertensive males among our study population were having a positive family history for hypertension. $51 \%$ hypertensive males were having income in the range of $10,000-20,000$ Rupees. On the basis of occupation study, $83 \%$ hypertensive females were housewives and $34 \%$ hypertensive males were the businessman. Out of total type A population, $70(49.3 \%)$ were found to be hypertensive.

Table No. 1: Distribution of Hypertension in Different Age Groups

| Sr. <br> No. | Age | Hypertensive |  | Non- hypertensive |  | Total |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percentage | Frequency | percentage | frequency | percentage |
| 1 | $20-30$ | 24 | 7. | 75 | 23. | 99 | 30. |
| 2 | $31-40$ | 38 | 11. | 48 | 15. | 86 | 26. |
|  | $41-50$ | 54 | 16. | 32 | 10. | 86 | 26. |
| 4 | $51-60$ | 20 | 6. | 10 | 3. | 30 | 9. |
| 5 | Above 60 | 20 | 6. | 11 | 3. | 31 | 9. |
|  | Total | 156 | 47 | 176 | 53 | 332 | 100 |

Table No.2: Relationship of Hypertension with Smoking

| Sr. <br> No. | History <br> of <br> smoking | Hypertensive |  | Non-hypertensive |  | Total |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Frequency | Percentage | frequency | percentage | frequency | percentage |  |
| 1 | positive | 35 | 11. | 32 | 9.60 | 67 | 20.10 |
| 2 | negative | 121 | 36. | 144 | 43. | 265 | 80. |
|  | Total | 156 | 47 | 176 | 53 | 332 | 100 |

Table No.3: Relationship of Hypertension with Exercise

| Sr. <br> No. | History <br> of <br> exercise |  | Hypertensive |  | Non-hypertensive |  | Total |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Frequency | percentage | frequency | percentage | Frequency | percentage |  |  |
| 1 | Yes | 45 | 14. | 84 | 25.30 | 129 | 38.80 |  |
| 2 | No | 111 | 33. | 92 | 27.70 | 203 | 61. |  |
|  | Total | 156 | 47 | 176 | 53 | 332 | 100 |  |

Table No.4: Relationship of Hypertension with the use of Ghee

| Sr. <br> No. | History of <br> use of Ghee | Hypertensive |  | Non-hypertensive |  | Total |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Frequency | Percentage | frequency | percentage | frequency | percentage |  |
| 2 | Yes | 88 | 27. | 92 | 28. | 180 | 54. |
|  | No | 68 | 21. | 84 | 25. | 152 | 46. |
|  | Total | 156 | 47 | 176 | 53 | 332 | 100 |

## DISCUSSION

In this comprehensive study of frequency of hypertension among Medical OPD patients, low-risk combinations are to change lifestyle factors such as
keep of a normal Body Mass index, diet rich in fruits, vegetables, low-fat dairy products and low in sodium, regular physical exercise on a daily basis were associated with reductions in the frequency of hypertension during follow up evaluation. In this
study, we check recent NHS of Pakistan that reported ( $21 \%$ ) of the metropolitan population suffer from hypertension. According to our study, the frequency among medical OPD patients is nearly $47 \%$ which coincides with the research conducted in OPDs of hospitals of Karachi. ${ }^{13}$ This result shows that hypertension frequency is very high among OPD patients, the reason could be disease-related stress and burden.
Of all the factors causing hypertension, the major factors which came into the spotlight by our research are age above 40 , excessive usage of ghee and oil and over-weight.
We found that $51 \%$ hypertensive males were having income in the range of $10,000-20,000$ Rupees. This could be due to the financial burden on the shoulder of a man. These middle-class people try to compete for a better lifestyle. The economic shortfall of our country multiplies the stress and burden and proves to be an important factor causing hypertension.
According to a research paper published in American journal named "Diet and lifestyle risk factors associated with the incidence of hypertension" by John P. Forman; Meir J. Stampfer; Gary C. Curhan $37 \%$ patients having hypertension in the USA having Blood pressure in control within normal range. ${ }^{12}$ This could be due to a sedentary lifestyle and excessive intake of alcohol in contrast to our country.
It is duly noted in our study that the frequency of hypertension is fairly high among housewives, i.e. $83 \%$ as compared to other professions. The reason could be domestic stress and tension as well as a sedentary lifestyle in our society.
People with type a personality are more vulnerable to hypertension as it can be noticed in our study. It is a cross sectional study. The data was scrutinized by SPSS 17.

## CONCLUSION

The frequency of hypertension in high in medical OPD patients.

Recommendations: The frequency of hypertension can be reduced by creating awareness about the factors causing it among people, like smoking, usage of ghee and lack of physical activity etc. Different programs should be conducted to improve the health of individuals and populations. Health programs should be conducted and more health surveys should be carried out.
Conflict of Interest: The study has no conflict of interest to declare by any author.

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