# A STUDY ON AWARENESS, KNOWLEDGE AND ADHERENCE OF MEDICATION IN PATIENTS WITH HYPERTENSION FROM TERTIARY CARE CENTRE OF KATHUA, J\&K: A HOSPITAL BASED STUDY. 

## Medical Science

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#### Abstract

Introduction- Hypertension is a treatable and preventable cause of mortality and morbidity disease. It is one of the important public health problems in both the developed and developing countries. Objective-To assess the patient's knowledge and awareness about hypertension and adherence to antihypertensive medication among hypertensive patients using WHO standardized Questionnaire. Material and Methodology- A cross- sectional study was conducted at the OPD clinic of Associated hospital of GMC Kathua. The hypertensive patients with or without comorbid conditions attending the Medicine OPD was included in the study. The study was conducted during a period of 2 months in the month of November and December, 2019. Results- Altogether 300 hypertensive patients were enrolled in the study. Among the participants, males were $44.33 \%$ and females were $55.66 \%$. Maximum hypertensive respondents go for their routine blood pressure check whenever they do not feel well. $36.33 \%$ of the respondents had blood history of hypertension. Maximum number of patients took the medication only when they feel that they need them. About $\mathbf{6 1 \%}$ were aware of any complications of hypertension. Conclusion- Proper IEC and BCC activities need to be undertaken at community level to increase the awareness about the benefits of adherence of the medication.


## KEYWORDS

eyelid tumours, histopathological, malignant

## INTRODUCTION

Hypertension is one of the chronic non-communicable diseases and is one of the important risk factor for many cardiovascular diseases. Hypertension is a treatable and preventable cause of mortality and morbidity disease. It is one of the important public health problems in both the developed and developing countries. 'According to World Health Organization 2008 report; about $40 \%$ of the population with age more than 25 years had hypertension. ${ }^{2}$ The important factors which are contributing for epidemiological transition of hypertension in world are ageing, sedentary lifestyle, urbanization, obesity and increased salt intake. ${ }^{3}$ The most important factors contributed to control in hypertension are adherence with therapy and dose of prescribed BP medications.

Adherence with the hypertensive medication was observed in less than $50 \%$ of population. ${ }^{4}$ Because of poor adherence, the effectiveness of drugs reduces which shows that it is a major barrier in improving the health of the patients

## MATERIALAND METHODOLOGY-

A cross- sectional study was conducted at the OPD clinic of Associated hospital of GMC Kathua. The hypertensive patients with or without comorbid conditions attending the Medicine OPD was included in the study. The study was conducted during a period of 2 months in the month of November and December, 2019. All the patients above the age of 40 years who were having history of hypertension or newly diagnosed were included in the study. Adults of age less than 25 years, pediatrics, pregnant and lactating women were excluded. WHO Standardized questionnaire of "Developing Integrated response of developing health care systems to rapid population Ageing" was used as study tool. In addition socio demographic profile was recorded for every study respondent. Data was entered in Microsoft excel. Descriptive statistical analysis was expressed in form of number and percentages. The study was carried after taking institutional ethical clearance as well as verbal consent from the patients who were enrolled in the study.

## RESULTS

Altogether 300 hypertensive patients were enrolled in the study. Among the participants, males were $44.33 \%$ and females were $55.66 \%$. Maximum number of patients was in the age group of 60-70 years followed by 51-60 years (Table 1). Maximum patients came to know about their hypertension from routine medical check- up and first diagnosed as having hypertension from the Primary Health Centre.

Maximum hypertensive respondents go for their routine blood pressure check whenever they do not feel well. $36.33 \%$ of the respondents had blood history of hypertension. Maximum number of patients took the medication only when they feel that they need them. About $61 \%$ were aware of any complications of hypertension.

Table 1. Demographic characteristics of the respondents ( $\mathbf{N}=\mathbf{3 0 0}$ )

| S.No. | Variables | $\mathbf{N}(\%)$ |
| :--- | :--- | :--- |
| $\mathbf{1 .}$ | Age group |  |
|  | $<40 \mathrm{yrs}$ | $20(6.66 \%)$ |
|  | $40-50 \mathrm{yrs}$ | $46(15.33 \%)$ |
|  | $51-60 \mathrm{yrs}$ | $58(19.33 \%)$ |
|  | $60-70 \mathrm{yrs}$ | $124(41.33 \%)$ |
| $>70 \mathrm{yrs}$ | $52(17.33 \%)$ |  |
| 2. | Gender |  |
|  | Males. | $133(44.33 \%)$ |
|  | Females. | $167(55.66 \%)$ |

Table 2. Diagnosis of Hypertension

| $\begin{aligned} & \mathrm{S.} . \\ & \text { NO. } \end{aligned}$ | Questions | Responses $\mathbf{N}$ (\%) |
| :---: | :---: | :---: |
| 1. | How did you come to know about your hypertension? <br> In a routine medical control <br> Screening programme <br> Emergency service <br> Other(specify) <br> I don't know | $\begin{aligned} & 97(32.33 \%) \\ & 94(31.33 \%) \\ & 38(12.66 \%) \\ & 20(6.66 \%) \\ & 51(17 \%) \\ & \hline \end{aligned}$ |
| 2. | Where were you first diagnosed as having hypertension? <br> Primary health centre <br> Secondary care hospital <br> Tertiary care hospital <br> At a pharmacy/drug store <br> Other <br> Don't know | $85(28.33 \%)$ $71(23.66 \%)$ $59(19.66 \%)$ $27(9 \%)$ $28(9.33 \%)$ $30(10 \%)$ |
| 3. | When were you diagnosed? First time $<5 \mathrm{yrs}$ $>5 \mathrm{yrs}$ | $\begin{array}{\|l} \hline 26(8.66 \%) \\ 101(33.66 \%) \\ 173(57.66 \%) \\ \hline \end{array}$ |
| 4. | Was the clinic or hospital where you were first diagnosed run by the government, a charitable organization or was it privately run? <br> Public <br> Private <br> NGO/Charity organization | $\begin{aligned} & 210(70 \%) \\ & 63(21 \%) \\ & 27(9 \%) \\ & \hline \end{aligned}$ |


| 5. | Where do you regularly go for routine follow up to <br> check your blood pressure? |  |
| :--- | :--- | :--- |
|  | Diagnosis on this visit | $26(8.66 \%)$ |
|  | Nearby PHC | $110(36.66 \%)$ |
|  | Nearby secondary hospital | $77(25.66 \%)$ |
|  | Tertiary hospital | $30(10 \%)$ |
|  | Do not do any routine follow up | $57(19 \%)$ |
| 6. | Do you have to pay fees for consultation and drugs <br> at the facility that you regularly go to for the <br> treatment of your hypertension? |  |
|  | Paid nothing <br> Paid part | $280(93.33 \%)$ |
|  | Paid fully | $15(5 \%)$ |
|  | Paid | $5(1.66 \%)$ |
| Don't know | - |  |

Table 3.Management of hypertension

| S. <br> No. | Questions | Responses <br> N(\%) |
| :--- | :--- | :--- |
| 1. | Have you been told by a doctor or nurse or <br> someone by this health centre to control your <br> blood pressure? |  |
| 2. | When do you go for your routine blood pressure <br> check? | $287(95.66 \%)$ |
|  | Diagnosis on this visit | $26(8.66 \%)$ |
|  | As advised by the doctor | $121(40.33 \%)$ |
|  | When I do not feel well. | $138(46 \%)$ |
|  | Both | $15(5 \%)$ |
|  | Other (specify) | - |
| 3. | Besides a Primary health centre, how else do you |  |
|  | get your blood pressure measured (checked)? |  |
|  | Secondary care hospital | $77(25.66 \%)$ |
|  | Tertiary care hospital | $30(10 \%)$ |
|  | Neighbour/family member | $4(1.33 \%)$ |
|  | Myself | $8(2.66 \%)$ |
|  | Nearby pharmacy | $71(23.66 \%)$ |
|  | I only checked my blood pressure in the PHC | $110(36.66 \%)$ |
| 4. | Compared to 12 months ago, is your blood |  |
|  | pressure: |  |
|  | Better | $259(86.33 \%)$ |
|  | Same |  |
|  | Worse |  |
| I don't know |  |  |
| I didn't get my BP measurement 12 months ago | $7(2.33 \%)$ |  |

Table 3. Complications and hospitalization

| S. <br> No | Questions | Responses <br> $\mathbf{N ( \% )}$ |
| :--- | :--- | :--- |
| 1. | Do you have blood relatives with history of <br> hypertension? | $109(36.33 \%)$ |
| 2. | Over the last year have you been admitted to <br> the hospital? | $58(19.33 \%)$ |
| 3. | Was it related to hypertension? | $43(14.33 \%)$ |
| 4. | Have you had any complications from your <br> hypertension? | $67(22.33 \%)$ |

Table 4.Medications and adherence

| S. <br> No | Questions | Responses <br> $\mathbf{N ( \% )}$ |
| :--- | :--- | :--- |
| 1. | Have you been prescribed any medication to <br> lower your blood pressure? | $289(96.33 \%)$ |
| 2 | Do you take all your prescribed medications? | $193(64.33 \%)$ |
| 3. | If you don't take your medication regularly, why <br> don't you take them as directed? |  |
|  | Cannot afford the cost | $27(9 \%)$ |
|  | Medications are not easily available. | $8(2.66 \%)$ |
|  | I don't like to take medications <br> I only take them when I feel that I need them <br>  <br> I don't like the side effects of the medication <br>  <br> I prefer alternative medicine <br> I forget | $17(5.66 \%)$ |
|  | I don't know | - |
|  | other | $14(4.66 \%)$ |

Table 5. knowledge and self care

| S.No. | Questions | Responses N (\%) |
| :--- | :--- | :--- |
| 1. | Are you aware of any complications of <br> hypertension? | $183(61 \%)$ |


| 2. | If you were aware, have you been <br> informed by the doctor or nurses or <br> someone by the health centre about these <br> complications? | $183(61 \%)$ |
| :--- | :--- | :--- |
| 3. | Have you been told that stroke is related to <br> hypertension? | $175(58.33 \%)$ |

## DISCUSSION

In the present study, the maximum respondents were between the age group of $60-70$ years followed by 51-60 years and these similar observations were reported in other study as well and dissimilar in another studies. ${ }^{6,7}$ In our study, majority of the females were hypertensive as compared to males. Majority of the respondents came to knew about having hypertension during routine medical check- up at Primary health centre. $57.66 \%$ of hypertensive patients were diagnosed as hypertensive more than 5 years and they are increased risk of developing complications due to hypertension.
$95.66 \%$ patients had been told by a doctor or nurse or someone by this health centre to control their blood pressure. $36.33 \%$ of the respondents had history of hypertension in blood relations. In 1972, The National High Blood Pressure Education Programme was launched to improve public knowledge of hypertension. ${ }^{8}$ Increase in awareness was also reported during the period from 1976-1991 from $51 \%$ to $73 \%$ from National Health and Nutrition Examination Survey. ${ }^{9}$ Regarding adherence to medication, $64.33 \%$ took all their prescribed medications and these similar findings were also observed in other studies. ${ }^{10,11}$ Those who didn't take medication regularly because of reasons like they only took the medication when they feel that they need them, cannot afford the cost. So, poor compliance leads to treatment failure and these were the main reasons for non-adherence and observed in other studies as well. ${ }^{12,13 .}$

## CONCLUSION-

The main reason of their poor compliance is non-adherence. The main reasons were they didn't take it regularly, cost. Important measures should be taken like behavioral change communication in the community level. Proper IEC activities need to be undertaken at community level to increase the awareness about the benefits of adherence of the medication.

## Declaration-

Conflicts of interest- nil
Funding-nil
Institutional ethical clearance- approved.

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