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Pattern of Compliance to Antihypertensive Medications in Hypertensive Patients in a Tertiary Care Hospital

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Abstract

Background: Hypertension is very prevalent and its incidence is increasing globally. About 970 million people suffer from hypertension and this is estimated to reach upto 1.5 billion by 2025.

Methods: This cross sectional study was done on hypertensive patients. All the antihypertensive admitted patients who were taking antihypertensive medications for at least last 6 months were included in this study. Consent was taken from each participant. A structured questionnaire was provided to the participant to collect information; verbal communication was done also. Prescriptions were collected as far as possible to verify the treatment history.

Results: Only 45(45.00%) patients were using antihypertensive medicine regularly while rest 55(55.00%) patients were irregularly using the medicines. Different patients expressed different reasons for not taking the medicines regularly. 6% of the patients said that lack of money to buy medicine was the reason for not taking it regularly, another 9.00% said that dissatisfaction with the treatment was the reason for same, 6.00% experienced side effects and said that is the reason for irregular use of medicine, 4.00% said busy schedule is the reason for the same. 9.00% of the patients said disbelief in efficacy of drug was the reason for irregular use, another 6.00% were using alternative therapy for same purpose and irregularly used the drug.

Conclusion: It is important to advocate the need of properly taking the medication at appropriate time and dose to control hypertension. The current study highlighted some of the determinants of not taking medication properly. Keeping all these factors into consideration, policy should be made accordingly so that there is good compliance and better control of Blood pressure and indirectly prevention of complications.

Keywords: Hypertension, Compliance, Control.

Introduction

Hypertension is very prevalent and its incidence is increasing globally.[1] About 970 million people suffer from hypertension and this is estimated to reach upto 1.5 billion by 2025.[2]

Hypertension is associated with many complications which may be microvascular or macrovascular. Many treatment options are available which may be pharmacological, dietary, alternative therapy like acupressure and life style modification. Poor adherence to treatment is a global problem identified by World

Health Organisation and it is seen that 50-70% of the patients do not take their medicines as prescribed. [3,4]

In this regard, most of the physicians would agree that patient compliance with their antihypertensive medications play a major role. Study from the National Health and Nutritional Examination Survey (NHANES)2 and from World Health Organization (WHO)3 have mentioned that less than one quarter of hypertensive worldwide achieve blood pressure at the goal of 140/90 mm Hg.[5] Such inadequately controlled hypertension may contribute to the disappointing reduction rate of coronary artery disease.[6]

A multicentre study done by WHO in the year 2001, revealed that 45% of elderly people in Bangladesh and India suffered from hypertension. 40% of them are aware of their disease and only 10% are compliant to treatment.[7]

As prevalence of hypertension is increasing, so we planned to conduct the study in the capital to assess the present status of compliance to antihypertensive treatment and to find out the reasons behind it; so that appropriate measures can be taken in an urgent manner.

Methods

This cross sectional study was done on hypertensive patients. All the antihypertensive admitted patients who were taking antihypertensive medications for at least last 6 months were included in this study. Consent was taken from each participant. A structured questionnaire was provided to the participant to collect information; verbal communication was done also. Prescriptions were collected as far as possible to verify the treatment history.

Inclusion Criteria: Hypertensive patients already taking medicines were included.

Exclusion Criteria: Newly diagnosed hypertensive patients were not included

Results

A total number of study populations were 100.

Tab.1. Socio-demographic variable

Variable	No of subjects
Age in Yrs	49.28±11.28
Male : Female	36 : 64
Rural : Urban	49:51

In this study we found that maximum patients were from 46 to 60 years age group (N=70). 36 patients were male and 64 patients were female.

Table 2- Showing pattern of adherence to antihypertensive medication and reasons for non adherence

Regular use of medicine	45 (45.00%)
Irregular use of medicine	55(55.00%)
Reasons for not taking medicine	
Forgetfulness	9(9.00%)
Lack of funds	6(6.00%)
Busy schedule	4(4.00%)
Experiencing side effects	6(6.00%)
Disbelief in efficacy of drugs	9(9.00%)
Dissatisfaction with treatment	9(9.00%)
Using alternative therapy	6(6.00%)
Not thinking important to take medicine regularly	6(6.00%)

Only 45(45.00%) patients were using antihypertensive medicine regularly while rest 55(55.00%) patients were irregularly using the medicines. Different patients expressed different reasons for not taking the medicines regularly. 6% of the patients said that lack of money to buy medicine was the reason for not taking it regularly, another 9.00% said that dissatisfaction with the treatment was the reason for same, 6.00% experienced

side effects and said that is the reason for irregular use of medicine, 4.00% said busy schedule is the reason for the same. 9.00% of the patients said disbelief in efficacy of drug was the reason for irregular use, another 6.00% were using alternative therapy for same purpose and irregularly used the drug.

Discussion

Maximum hypertensive patients in our study were females as in other studies. [8,9] Maximum of the patients were not adherent to regular medicine intake in present study as many other studies. [10-12] These results are contrary to results of many studies.[13-16]

In our study only 45(45.00%) patients were using antihypertensive medicine regularly while rest 55(55.00%) patients were irregularly using the medicines. Different patients expressed different reasons for not taking the medicines regularly. 6% of the patients said that lack of money to buy medicine was the reason for not taking it regularly, another 9.00% said that dissatisfaction with the treatment was the reason for same, 6.00% experienced side effects and said that is the reason for irregular use of medicine, 4.00% said busy schedule is the reason for the same. 9.00% of the patients said disbelief in efficacy of drug was the reason for irregular use, another 6.00% were using alternative therapy for same purpose and irregularly used the drug. The reasons for non compliance were multiple as same as documented in other studies. 6.00% of the patients said that lack of money to buy medicine was the reason for not taking it regularly. In developing country like India, affordability is a major concern. This is in accordance with other studies in which non availability of free medicines from Govt. dispensary was the reason for non adherence.[17] So, drugs of common diseases like hypertension should be available free of cost at Govt. hospitals or dispensaries. Another 6.00% were using alternative therapy for same purpose and irregularly used the drug as in study by Roshi et al.[18] 2% said that the same salt of medicine is sometimes unavailable in the market and they miss their daily dose of drug in accordance with the study of CJ Navya.[10] Many a times the pharmacist gives the substitute of the prescribed salt which may not be as efficient as the original one as efficacy changes with change in the brand.

Conclusion

It is important to advocate the need of properly taking the medication at appropriate time and dose to control hypertension. The current study highlighted some of the determinants of not taking medication properly. Keeping all these factors into consideration, policy should be made accordingly so that there is good compliance and better control of Blood pressure and indirectly prevention of complications.

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