



International Journal of Research in Pharmacology & Pharmacotherapeutics



ISSN Print: 2278-2648 IJRPP |Vol.4 | Issue 3 | Jul – Sep - 2015
ISSN Online: 2278-2656 Journal Home page: www.ijrpp.com

Research article

Open Access

Knowledge, attitude, awareness of hypertension and compliance of antihypertensive drugs among patients attending cardiac OPD in super speciality hospital

¹Dr. Sushil K. Sharma, ²Dr. Vineeta Sawhney*

¹Associate Professor & Head, Department of Cardiology, Super speciality Hospital, GMC Jammu

²Assistant Professor, Department of Pharmacology, GMC, Srinagar

*Corresponding author: Dr. Vineeta Sawhney

E-mail id: vineetasawhney@yahoo.com

ABSTRACT

BACKGROUND

Hypertension is a major risk factor for cardiovascular disease and awareness about the disease and adherence for the antihypertensive drugs is poor.

AIM OF THE STUDY

To assess the knowledge, attitude, awareness among hypertensive patients and compliance for the drugs.

STUDY DESIGN

A cross sectional study

SETTING

The study was conducted in outpatient department of Cardiology in Super speciality hospital of Government Medical college Jammu.

MATERIALS AND METHODS

Hypertensive patients who attended the outpatient clinic during one month period of 1st July to 31st July 2015 were given a questionnaire regarding sociodemographic profile, risk factors for high blood pressure, awareness & adherence to treatment were recorded and analysed in percentage.

RESULTS

There were 180 hypertensive patients, out of which 108 were males, 72 were females, 63.9% were in age group of 41-60yrs and from rural areas, 80(44.4%) have to travel at least for one to two hrs to reach the hospital. 80% of them were married, 87.7% belong to Hindu religion, 56.1% have qualification of 10th std 31.6% were govt employee & 55.5% have monthly income of 1000-10,000. 75% knew that it is a lifelong disease and 72.2% knew that treatment is lifelong. Only 56.1% has knowledge of reading of BP, 87.7% and 63.8% has awareness of symptoms and complications respectively. More than 80% has awareness about the other risk factors.

CONCLUSION

Overall knowledge, awareness attitude and compliance of hypertensive patients was good as these were already diagnosed patients and were on follow up for 2-3 yrs. There is need of launching a comprehensive approach involving primary health care providers and to screen the patients in general public and to educate them about the disease & need to take drugs regularly.

KEY WORDS: Hypertension, Awareness, Knowledge, Compliance.

INTRODUCTION

Hypertension is a very common and important disease of modern civilized life and its complications pose a major health problem in population worldwide. Awareness has led to further understanding and treatment of this disease. The aetiology of hypertension is multifactorial, which results from the combined influence of genetic and environmental factors. It predisposes to Coronary heart disease, myocardial hypertrophy, cardiac dysfunction and deleterious neurological effects on retina, CNS and kidney. Globally, the overall prevalence of raised BP in adults aged 25yrs & over was around 40% in 2008(1). A community based survey was carried out by ICMR during 2007-2008 to identify the risk factors for non communicable disease & the prevalence of hypertension was 17 to 21% with marginal rural-urban difference. The prevalence of raised BP was consistently high, with low, lower-middle & upper-middle income countries all having rates of 40% for both sexes (2). Despite the fact that it is one of the modifiable risk factor (3) yet the patients education of early diagnosis and control of hypertension has not received enough attention worldwide (4). Even the patients are not aware and if aware, remain untreated and uncontrolled because of lack of knowledge (5). Adherence to the therapy is often poor and not consistent (6). Awareness and attitude of the patients are affected by the certain factors like lack of symptoms and work load whereas lack of adherence is due to lack of education, living in inaccessible areas and not enough money to purchase medicine. Every year since 2006 on May 17th the world Hypertension league (WHL), in close partnership with the International Society of Hypertension (ISH) and other organisation has hosted world Hypertension day and for the year 2013-2018 the theme of this day is “know your number” with the goal of increasing high blood pressure awareness in all populations around the world (7). The consequences of this awareness will be that we can prevent heart attack, heart failure, stroke, kidney failure, retinal haemorrhage and atherosclerosis. The aim of this study was to assess the knowledge, attitude, awareness and adherence related to hypertension and antihypertensive drugs among the patients attending cardiac OPD in super speciality hospital and in our setup it is the first kind of the study.

MATERIALS AND METHODS

This cross sectional study was conducted in the outpatient department of cardiology in super speciality hospital of Government medical college Jammu for a period of one month from 1st July to 31st July 2015. A sample size of 180 hypertensive patients was interviewed using a pre texted, structured, mostly closed- ended questionnaire.

The data was collected by interview method in the OPD for two days in a week. The questionnaire include the socio demographic profile, knowledge, attitude, awareness regarding the hypertension, their risk factors , clinical manifestations, complications and compliance about the antihypertensive drugs. Interview of the patients were conducted separately after explaining them the purpose properly. Data was collected and then analyzed by using percentage.

RESULTS

The result shows that 180 patients were interviewed and out of which 108 (60%) were males and 115(63.9%) were in age group of 41-60yrs, majority of them belongs to rural area 115(63.9%) and 80(44.4%) have to travel at least for one to two hour to reach the hospital. The maximum number of patients 144(80%) were married and were Hindus 158(87.7%) having education up to 10th standard 101(56.1%) and were government employee 57(31.6%) and 100(55.5%) have monthly income of 1000-10,000. In present study majority of patients were non-smoker and non-alcoholic (75.5%) (Table-1). Patients’ knowledge, attitude and awareness is presented in (Table2). Most of them were knowledgeable about the disease and 135(75%) of patients knew that high blood pressure is a lifelong disease and 130(72.2%) of the patients were aware that treatment is lifelong whereas 50(27.7%) of them believed that treatment was only for 2-4 weeks but 101(56.1%) of patients only knew that blood pressure is high when it is more than 140/90. Of note, majority of 115 patients (63.8%) were aware that high blood pressure can affect heart, kidney and brain whereas 158(87.7%) patients were aware that when blood pressure is high they feel different like headache and palpitation. Regarding the cardiovascular risk factors patients attitude and knowledge about the physical exercise, losing weight and reducing intake of salt is helpful in

controlling blood pressure it was 144(80%), 130(72.2%) and 166(92.2%) of the patients respectively. It was observed that about 166(92.2%) of the patients believed that by reducing stress and 173(96.1%) of them think that by taking antihypertensive drugs their blood pressure get controlled. Compliance of the patients shown in Table- 3 and it was found that 172

(95.5%) of patients feel good after taking medicines and 140 (77.7%) have funds to purchase the drugs whereas 145 (80.5%) took drugs even during busy schedule. It was seen that 122(67.7%) stopped taking drugs when they were not available and 148(82.2%) consult their doctor for the drugs whether to continue or not when they were suffering from some other illness.

Table 1: Socio demographic profile of hypertensive patients

Variables	Number (%)
Sex	180(%)
Male	108(60%)
Female	72(40%)
Age	
18-40	7(3.9%)
41-60	115(63.9%)
> 60	58(32.2%)
Residence	
Rural	115(63.9%)
Urban	65(36.1%)
Marital status	
Single	2(1.1%)
Married	144(80%)
Divorced	6(3.3%)
Widowed	28(15.5%)
Religion	
Hindu	158(87.7%)
Muslim	7(3.9%)
Other	15(8.3%)
Employment	
Govt	57(31.6%)
Retired	22(12.2%)
Housewife	51(28.3%)
Businessman	15(8.3%)
Farmer	29(16.1%)
Any other(Army personal)	6(3.3%)
Educational status	
Degree	43(23.9%)
Diploma	14(7.7%)
10 th std	101(56.1%)
Can't read	22(12.2%)
Monthly income	
1000-10000	100(55.5%)
>10,000	65(36.1%)
<1000	15(8.3%)
Distance from hospital	
More than 2 hour	42(23.3%)
Between 1-2 hour	80(44.4%)
Up to 1 hour	58(32.2%)

Habits

Smoking Yes- 44(24.4%), No-136(75.5%)

Alcohol Yes-44(24.4%), No-136(75.5%)

Table-2 Knowledge, attitude and awareness about the hypertension and the antihypertensive drugs

1. Is high blood pressure is a lifelong disease?	
Yes	135(75%)
No	45(25%)
2. Whether you feel different with high blood pressure?	
Yes	158(87.7%)
No	22(12.2%)
3. Is the pressure is high when it is above >140/90?	
Yes	101(56.1%)
No	79(43.8%)
4. Can high blood pressure cause heart, brain and kidney damage?	
Yes	115(63.8%)
No	65(36.1%)
5. Whether treatment is lifelong?	
Yes	130(72.2%)
No	50(27.7%)
6. Does regular physical exercise help in controlling high BP?	
Yes	144(80%)
No	36(20%)
7. Does losing weight is helpful in controlling high BP in obese people?	
Yes	130(72.2%)
No	50(27.7%)
8. Do reducing salt intake help in controlling high BP?	
Yes	166(92.2%)
No	14(7.7%)
9. Does reducing stress help in controlling high BP?	
Yes	166(92.2%)
No	14(7.7%)
10. Whether taking drugs control BP?	
Yes	173(96.1%)
No	7(3.8%)

Table 3- Compliance of antihypertensive drugs

1. When I take medicines I feel good	
Yes	172(95.5%)
No	4(4.4%)
2. Whether I have funds to purchase drugs	
Yes	140(77.7%)
No	40(22.2%)
3. Whether I take drugs when I am having busy schedule	
Yes	145(80.5%)
No	35(19.4%)
4. Whether I stop taking drugs when not available	
Yes	58(32.2%)
No	122(67.7%)
5. Whether I take drugs when I am having some other illness	

Yes	148(82.2%)
No	32(17.7%)

DISCUSSION

Hypertension is a known risk factor for cardiovascular, cerebrovascular and renovascular disease. Awareness of hypertension among those affected by the disease is generally high as compared to the general population (8). This study evaluated the awareness, knowledge among hypertensive patients and these patients are regarded as more knowledgeable and aware about the disease. In the present study we found that the maximum number of patients were in age group of 41-60 years and belong to rural area (63.9%). We also found that awareness of hypertension is good and more than 70% of them knew that the disease and treatment is lifelong process. But only 56.1% were having knowledge about the readings of high and normal blood pressure whereas rest of 45% did not have any awareness about the systolic and diastolic blood pressure and it was similar to the other studies on general population (9, 10, 11). So this shows that there is need of proper communication to increase awareness about target level of blood pressure. In present study maximum number of patients were aware that the modifiable risk factors like smoking, alcohol consumptions, regular physical exercise, and losing weight in obese people, less intake of salt & reducing stress in day to day life are important for controlling the high blood pressure and this was a positive finding in our study. 63.8% patients knew that hypertension would cause stroke, kidney and heart problem whereas rest of 36.2% were having no knowledge about the morbidity and mortality of this disease. Regarding compliance it is defined as the extent to which the patient's behaviour in terms of taking medicines, following diets or executing other life-style changes coincides with the clinical perceptions. The compliance rates can be improved through education directed to patients, families and the community. In the present study about 92.2% patients were taking prescribed drugs to control blood pressure and 95.5% feel better after taking

drug therapy. So in the present study a good number of patients were adherent to drug therapy. Similar results were seen in a Japanese study and it was found that 63.8% of their patients reported taking 95-100% of prescribed drugs (12). In this study it was seen that approximately 56.1% of them were educated up to 10th std and 31.6% were government employee and that is why 77.7% have funds to purchase the drugs. Isezuo and Opara reported that ignorance, lack of funds, non-availability of drugs, busy schedule, absence of symptoms, forgetfulness were common factors of poor compliance (12). In present study 80.5% tried to take drugs even when they have busy schedule whereas 67.7% stopped taking drugs when they were not available and 82.2% took drugs when they were suffering from other illness and for that they consult the doctor. So a good compliance was seen among patients attending OPD in this study. Similar results were observed in Switzerland where good compliance was seen in 80.8% (13). Compliance can be further improved by simplifying dosage regimens, good doctor-patient relationship than the patient's education. In conclusion, this study has demonstrated an adequate knowledge, awareness, attitude about the hypertension and compliance of anti - hypertensive drugs and the results were contradictory to the results seen in previous Studies (14). This may be because as the study is conducted in super speciality hospital and in the department of cardiology and these patients are already screened and were on the treatment for the last 2-3 yrs & this may be the reason that the patients have good knowledge and awareness. Based on these findings there is need of launching a better approach involving health care providers, screening of patients in general population and providing them the education of taking drugs regularly. Doctors should always consider the financial status of the patients before prescribing the drugs.

REFERENCES

- [1]. WHO (2011), Global Status report of non-communicable diseases 2010.
- [2]. K.Park. Park's Textbook of preventive and social medicine. 23rded (2015) page-374.
- [3]. Betre M, Kebede D, Kassaye M. Modifiable risk factors for coronary heart disease among young people in Addis Abada. East Afr Med J 1997; 74:376-81.

- [4]. Kearney PM, Whelton M, Reynolds K, et al. Worldwide prevalence of hypertension: a systematic review. *J Hypertens* 2004; 22:11-9.
- [5]. Pereira M, Lunet N, Azevedo A, Barros H. Differences in prevalence awareness, treatment and control of hypertension between developing and developed countries. *J Hypertens* 2009. Pubmed-NCBL.
- [6]. Joffers MR, Hamet P, Rabkin SW, Gelskey D, Hogan K, Fodor G. Prevalence, control and awareness of high blood pressure among Canadian adults. Canadian Heart Surveys Research Group. *CMAJ* 1992.
- [7]. Chockalingam A- World Hypertension day and global awareness. *The Canadian Journal of Cardiology* June 2008; 24(6): 441-4.
- [8]. Familoni OB, Hypertension- How much do our patients know? *Afr Health*, 2002; 24:13.
- [9]. Egan BM, Lackland DT, Cutler NE. Awareness, knowledge and attitudes of older Americans about high blood pressure: Implications for health care policy, education and research. *Arch Intern Med* 2003; 163:681-7.
- [10]. Joffers MR, Ghadirian P, Fodor JG. Awareness treatment and control of hypertension in Canada. *Am J Hypertens* 1997; 10:1097-102.
- [11]. Elkhalfifa AM, Kinsara AJ, Almadani DA. Prevalence of hypertension in a population of healthy individuals. *Med Prince Pract* 2011; 20(2): 152-5.
- [12]. Isezuo A.S., Opera T.C. Hypertension awareness among Nigerians in a Nigerian tertiary health institution. *Sahel Medical Journal* 2000;3 (2):93-96.
- [13]. Muesch R., Schroeder K., Dieterie T., Martina B and Bategay E. Relationship between insufficient response to antihypertensive treatment and poor compliance with treatment; a prospective case control study. *BMJ* 2001; (32): 143-5.
- [14]. Oluranti familoni, Abayomi O.S, Olutayin A.A. Knowledge and awareness of hypertension among patients with systemic hypertension. *Journal of the National Medical Association* vol 96, No. 5. May 2004.