Health seeking behaviour in elderly hypertensive patients: a hospital based study

Jain J¹, Sinha U²

¹Dr Jitendra Jain, Professor, Department of Medicine, Chirayu Medical College & Hospital, Bhopal, MP, ² Dr Umesh Sinha, Associate Professor, Department of Community Medicine, Chirayu Medical College & Hospital, Bhopal, (M.P)

Address for correspondence: Dr Umesh Sinha, Email: roshanchanchlani@gmail.com

Abstract

Background: Hypertension is now widely prevalent in several developing countries particularly those in rapid transition and is affecting both the elderly and middle aged alike. Prior studies have shown that anti-hypertensive drug treatment for older hypertensive persons confers highly significant and clinically relevant reductions in cardiovascular morbidity and mortality rates. Nevertheless, a considerable percentage of older persons with hypertension are not detected or are not adequately treated for hypertension. Material and Methods: A Hospital-based cross-sectional study was carried out in the Department of Medicine of Chirayu Medical College and Hospital, Bhopal located in central India. A pretested and pre-structured oral questionnaire was used to interview the subjects and to collect data on demographic characteristics, health seeking behaviour and expenditure on treatment for hypertension (in previously diagnosed cases). Results: All the elderly hypertensives were visiting the doctor at least once in a month. 80% of the hypertensives had their BP checked once in 15 days. Out of total patients, 60% reported that they missed at least single dose in the last one month period. 8% reported that they skipped their medicine for more than 7 days due to some reasons. Conclusion: urgent steps to improve health education and health promotion (specifically on modifiable risk factors and awareness of BP) measures have to be made by the policy makers on a large scale.

Keywords: Elderly, Hypertension, Health seeking Behaviour

.....

Introduction

Among all the degenerative problems, Hypertension is one of the most important causes of cardiovascular morbidity and mortality in the elderly. With the increase in the number of elderly in India hypertension is likely to emerge as an important public health problem [1]. Hypertension is now widely prevalent in several developing countries particularly those in rapid transition and is affecting both the elderly and middle aged alike. Our population is aging, and as hypertension affects most elderly people (more than 65 years of age), these individuals are more likely to have organ damage or clinical cardiovascular disease (CVD). They represent management dilemmas because most hypertension trials had upper age limits or did not present age-specific results. However, because the Hypertension in the Very Elderly Trial (HYVET) documented antihypertensive therapy benefits in persons more than 80 years of age, it is timely to place into perspective issues relevant to hypertension

Manuscript received: 22nd Jan 2015 Reviewed: 10th Feb 2015 Author Corrected: 19th Feb 2015 Accepted for Publication: 25th Feb 2015 management in elderly patients [2]. The benefits of antihypertensive drug therapy for older persons have been clearly established. Prior studies have shown that antihypertensive drug treatment for older hypertensive persons confers highly significant and clinically relevant reductions in cardiovascular morbidity and mortality rates [3]. Nevertheless, a considerable percentage of older persons with hypertension are not detected or are adequately treated for hypertension Hypertension is the one of the most common cardiovascular problem encountered in clinical practice in India [5]. Chronic NCDs contributed to 35 of the 58 million deaths (60.3%) in the world in 2005, 80% of these deaths occurred in low and middle income countries [6]. Based on available trends; by 2020 NCDs are predicted to account for 73% of deaths and 60% of disease burden. In India, NCDs were responsible for 53% of deaths and 44% of disability adjusted life years lost [7]. Hypertension is the commonest cardiovascular disorder, posing a major public health challenge to elderly population residing in regions undergoing and socioeconomic epidemiological transition. It is one of

Available online at: www.ijmrr.in 203 | P a g e

the major risk factor for cardiovascular mortality, which accounts for 20-50% of all deaths [8].

Material and Methods

A Hospital-based cross-sectional study was carried out in the Department of Medicine of Chirayu Medical College and Hospital, Bhopal located in central India. All the patients aged more than 60 years of age who visited hospital out-patient department were included in the study. Elderly patients who were critically ill and unable to respond to the questions were excluded. A pretested and pre-structured oral questionnaire was used to interview the subjects and to collect data on demographic characteristics, health seeking behaviour and expenditure on treatment for hypertension (in previously diagnosed cases).

BP measurement was done as per the standard guidelines, i.e. using mercury sphygmomanometer in

right arm in the sitting position with feet kept firmly on ground and arm kept at the level of the heart. BP was measured on two separate occasions with a minimum interval of at least 5 minutes between the two measurements. A systolic BP of \geq 140 mm Hg and/or a diastolic BP of \geq 90 mm Hg measured on two separate occasions with a minimum interval of at least 5 minutes between the two measurements OR a self-reported history of taking anti-hypertensive medications is defined as hypertension [9].

Expenditure on treatment for hypertension was selfreported and calculated based on the money spent on consultation with a private practitioner and that spent on purchasing anti-hypertensive medication outside the government health system.

Statistical Analysis: Data were entered in excel sheet and then analyzed using Microsoft Excel 2007.

Results

Table 1: Socio-demographic characteristics of study subjects

Variables	Values	
Age in years		
Mean	63±8.9	
Median	65	
Gender		
Male	70	
Female	42	
Literacy		
Illiterate	09	
Literate	103	
Widow		
Lost their spouse	32	
Economic dependency		
Dependent	42	
Occupational status		
Currently employed in some work	52	
Smoking status		
Ever smoker	48	
Current smoker	12	
Smokeless tobacco user	16	
Diabetes		
Yes	24	

The study comprised of 112 cases of hypertension. Maximum numbers of patient were observed in the age range 56-75 years comprising 70(62.5%) males and 42(37.5%) females. Out of total 112 cases 84(75%)

cases were previously diagnosed cases of hypertension whereas 28(25%) cases were diagnosed at the time of study. Among the previously diagnosed cases of hypertension, 50(59.5%) were diagnosed at government

hospital whereas 34(41.5%) were diagnosed at private setups. 90% of the previously diagnosed patients aware that they are suffering from hypertension. Out of total 112 cases of hypertension 55% were taking their antihypertensive medications from government hospitals and 45% were taking their medications from medical stores.

All the elderly hypertensives were visiting the doctor at least once in a month. 80% of the hypertensives had their BP checked once in 15 days. Out of total patients, 60% reported that they missed at least single dose in the last one month period. 8% reported that they skipped their medicine for more than 7 days due to some reasons. About 40% reported that they follow a diet pattern, like consuming less oily foods and restricted salt intake in the diet. 85% of the patients know that medications have to be continued for life time.

When we asked the previously diagnosed cases of hypertension about the expenditure incurred on medicines, the mean expenditure on consultation came out to be rupees 35 ± 13.5 per visit and expenditure on medicines was about rupees 245 ± 40 per month.

Discussion

In our study the mean age of patients was 63±8.9 years comprising 70(62.5%) males and 42(37.5%) females. Only 8 % 0f the study subjects were found to be illiterate in our study and 90% of the previously diagnosed patients aware of their hypertensive status whereas in a study conducted by Palanivel Chinnakali and Bharathy Mohan in kerala, 65% of the study participants were illiterate in their study and 62% were found to be hypertensive were already aware of their hypertensive status [10].

Out of total 112 study subjects 34(41.5%) were diagnosed at private health facilities whereas Palanivel Chinnakali and Bharathy Mohan found in their study that about half of hypertensives had been diagnosed by private practitioners [10]. This finding shows the preference toward government health facilities and that the elderly were spending less money from their pocket for diagnosis and as well as treatment of hypertension [10].

About 60% of the hypertensives had reported that they missed at least one dose of anti-hypertensive drug during the last one month whereas Palanivel Chinnakali and Bharathy Mohan found in their study that about half

of hypertensives missed at least one dose of antihypertensive drug during the last one month [10].

The study was carried out in the hospital and sample was selected by a convenience sampling method. Findings of this study cannot be generalized to whole population, but it provides an overview of the problem and puts forward suggestions for early diagnosis and management of hypertension in the elderly.

Information regarding alcohol intake, body mass index, and dyslipidemia were not collected. Estimates of expenditure on treatment for hypertension and adherence to anti-hypertensive medication were based on smaller sample of individuals.

As the elderly population is likely to increase in future, and there is definite shift in the disease pattern, i.e. from communicable to non-communicable, it is high time that the health care system gears itself to growing health needs of the elderly in an optimal and comprehensive manner.

Conclusion

In view of these findings, urgent steps to improve health education and health promotion (specifically on modifiable risk factors and awareness of BP) measures have to be made by the policy makers on a large scale. Existing interventions should look at incorporating multicomponent and multilevel approaches for better managing BP among Indians, as current rates for awareness, treatment of BP, and control of BP among those on treatment are very low.

Funding: Nil

Conflict of interest: None initiated.

Permission from IRB: Yes

References

- 1. Kalavathy MC, Thankappan KR, Sarma PS, Vasan RS. Prevalence, awareness, treatment and control of hypertension in an elderly community-based sample in Kerala, India. Natl Med J India. 2000 Jan-Feb;13(1):9-15
- 2. ACCF/AHA 2011 Expert Consensus Document on Hypertension in the Elderly. A Report of the American College of Cardiology Foundation Task Force on Clinical Expert Consensus Documents. www.circ.ahajournals.org/content/123/21/2434.full Pdf. [Accessed January 18, 2015].

- 3. Reynolds E, Baron RB. Hypertension in women and the elderly. Some puzzling and some expected findings of treatment studies. Postgrad Med. 1996 Oct;100(4):58-63, 67-70.
- 4. NHS centre for reviews and dissemination. The University of York; 1999. Effectiveness matters. Drug treatment of essential hypertension in older people at http://www.york.ac.uk/inst/crd/EM/em42.pdf. [Accessed on January15, 2015].
- 5. Bansal SK, Saxena V, Kandpal SD, Gray WK, Walker RW, Goel D. The prevalence of hypertension and hypertension risk factors in a rural Indian community: A prospective door-to-door study. *Journal of Cardiovascular Disease Research*. 2012;3(2):117-123. doi:10.4103/0975-3583.95365.
- 6. Strong K, Mathers C, Leeder S, Beaglehole R. Preventing chronic diseases: how many lives can we save? Lancet. 2005 Oct 29-Nov 4;366(9496):1578-82.

- 7. Reddy KS, Shah B, Varghese C, Ramadoss A. Responding to the threat of chronic diseases in India. Lancet. 2005 Nov 12;366(9498):1744-9.
- 8. Pawar AB, Bansal RK, Bharodiya Paresh. Prevalence of hypertension among elderly women in slums of Surat city. National Journal of Community Medicine 2010;1(1):39-40.
- 9. The ^{7th} report of the Joint National Committee on prevention detection evaluation and treatment of high blood pressure. National Institutes of health. [Accessed January 3, 2015]. Available at http://www.nhlbi.nih.gov/guidelines/hypertension
- 10. Chinnakali P, Mohan B, Upadhyay RP, Singh AK, Srivastava R, Yadav K. Hypertension in the Elderly: Prevalence and Health Seeking Behavior. N Am J Med Sci. 2012 Nov;4(11):558-62. doi: 10.4103/1947-2714.103314.

How to cite this article?

Jain J, Sinha U. Health seeking behaviour in elderly hypertensive patients: a hospital based study. *Int J Med Res Rev* 2015;3(2):203-206. doi: 10.17511/ijmrr.2015.i2.038.

.....