Original Research Paper　　　　　　　　　　**Management**

ASSESSMENT OF LEVEL OF KNOWLEDGE RELATED TO HYPERTENSION IN HYPERTENSIVE ELDERLY PATIENTS AT TERTIARY CARE HOSPITAL

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ABSTRACT

Introduction: Hypertension is one of the commonest diseases among the people above 60 yrs of age. It is mostly called as the "silent killer" as most of the clients does not know the symptoms of the onset.

Aim: To assess the level of knowledge regarding hypertension among the hypertensive elderly patient.

Methods: Multiple choice questions which were prepared to assess the knowledge on hypertension and its management among hypertensive elderly

Results: Among 40 patients 3(7.5%) patients had inadequate knowledge, 13 (32.5%) patients had moderately adequate knowledge, 24 (60%) patients had adequate knowledge. There was significant relationship between dietary habits, knowledge of hypertension and showed highly significant at P<0.001 level.

Conclusion: This study has shown high poor level of knowledge about hypertension and perceptions toward lifestyle-modification. So educational program that can enhance patients' awareness regarding hypertension disease are urgently needed among these patients.

KEYWORDS	hypertension, knowledge, risk

INTRODUCTION

Hypertension is a major worldwide public health problem because of its high prevalence with vascular disease, premature death, stroke, renal diseases and retinopathy (1). It is the most important risk factor for cardiovascular diseases which kill about 12 million annually worldwide, more than any other diseases (2). Hypertension is defined as a medical condition in which the blood pressure in the arteries is elevated exceeding 140 over 90 mmHg. This elevation makes the heart work harder than usual to circulate blood through the blood vessels (3,4). Reduction of blood pressure reduces this risk in people with and without hypertension and is a desired goal in children and adults.[5,6] Even as most studies describe knowledge of hypertension and its risk factors in older adults and the elderly,[7] there is a paucity of such data among teenagers and young adults, as they are considered to be at a lower risk of developing the disease. With a growing problem of hypertension worldwide, there is a concern that hypertension in elderly may also be on the rise and that cases are not detected because of inadequate screening in this age group (8).

AIM

To assess the level of knowledge regarding hypertension among the hypertensive elderly patient.

MATERIALS AND METHODS

A structured interview schedule was developed based on the objectives of the study; through review of literature on related studies, journals, and books; opinion from the experts. The instrument used in this study consists of two sections which are as follows:

SECTION A: demographic data
SECTION B: It consisted of multiple choice questions which were prepared to assess the knowledge on hypertension and its management among hypertensive elderly.

Method of scoring and interpretation: Each correct answer carries "1" mark and wrong answer carries '0' mark. The maximum score is '30'and the minimum score is '0'. According to the scores obtained by the samples, it was categorized as follows by the investigators.

- >71% - Adequate knowledge
- 41-70% - Moderately adequate knowledge
- < 40% - Inadequate knowledge.

Method of data collection: the data was collected using structured interview schedule.

RESULTS

Among 40 patients, 16 (40%) patients were in the age group of more than 55 years 6 (15%) patients were in the age group of 40 - 45 years. Among 40 patients, the majority 26 (65%) patients were male 14 (35%) patients were female. Regarding educational status 22 (55%) patients had their primary school education, 18 (45%) patients had their Higher Secondary education. Regarding Occupation 20 (50%) patients were sedentary and 8 (20%) patients were Heavy worker. In respect to dietary pattern, the majority 34 (85%) patients were non-vegetarian, and 6(15%) patients were vegetarian. Regarding monthly income of the family was above Rs. 2000 for 13 (32.5%) Patients, and between Rs. 500 - 1000 for 10 (25%) patients.

Table 1 Distribution of demographic Variables

Demographic Variables		Frequency (N)	Percentage (%)
Age	40 - 45 yrs	6	15
	46 - 50 yrs	8	20
	51 - 55 yrs	10	25
	more than 56 yrs	16	40
Gender	Male	26	65
	Female	14	35
Educational Status	Illiterate	0	0
	Primary School	22	55
	Higher Secondary	18	45
	Graduate	0	0
Occupation	Sedentary	20	50
	Moderate Worker	12	30
	Heavy Worker	8	20
Diet	Vegetarian	6	15
	Non-Vegetarian	34	85
Economic Status	Rs. 500 - 1000	10	25
	(Rs. 1000 - 1500	5	12.5
	Rs. 1500 - 2000	12	30
	Rs. 2000 above	13	32.5

Table 2 Distribution of level of Knowledge on Hypertension among elderly people

S.No.	Level of Knowledge	(N)	(%)
1	Inadequate	3	7.5
2	Moderately adequate	13	32.5
3	Adequate	24	60

Table 3 Association level of knowledge on Hypertension with demographic variables among elderly

Demographic Variables		Level of Knowledge						2 N = 40 P < 0.05
		Inadequate		Moderate		Adequate		
		N	%	N	%	N	%	
Age	40 - 45 yrs	0	0	5	12.5	3	7.5	7.05 Ns
	46 - 50 yrs	1	25	3	7.5	4	10	
	51 - 55 yrs	0	0	2	5	8	20	
	more than 56 yrs	2	5	3	7.5	9	22.5	
Gender	Male	1	2.5	7	17.5	18	45	2.72 Ns
	Female	2	5	6	15	6	15	
Educational Status	Illiterate	0	0	0	0	0	0	3.471 Ns
	Primary School	3	7.5	8	20	11	27.5	
	Higher Secondary	0	0	0.5	12.5	13	32.5	
	Graduate	0	0	0	0	0	0	
Occupation	Sedentary	2	5	3	7.5	9	22.5	5.74 Ns
	Moderate Worker	1	2.5	6	15	13	32.5	
	Heavy Worker	1	2.5	4	10	1	2.5	
Diet	Vegetarian	0	0	1	2.5	5	12.5	15.70 P<0.0
	Non-Vegetarian	3	7.5	12	30	19	47.5	
Economic Status	Rs. 500 - 1000	2	5	1	2.5	8	20	6.35 Ns
	(Rs. 1000 - 1500	1	2.5	1	2.5	3	7.5	
	Rs. 1500 - 2000	1	2.5	4	10	7	17.5	
	Rs. 2000 above	0	0	6	15	6	15	

There was no significant relationship between Age group, sex, educational status, occupation and monthly income with knowledge of hypertension with statistical significant P<0.05. There was significant relationship between dietary habits, knowledge of hypertension and showed highly significant at P<0.001 level.

DISCUSSION

This study finding showed that, among 40 patients, 3 (7.5%) patients had inadequate knowledge, 13 (32.5%) patients had moderately adequate knowledge 24 (60%) patients had adequate knowledge. A study of Susan A Oliveria (2005) which focuses or emphasized on Hypertension knowledge, awareness, attitude in a Hypertensive population. 1250 patients, results, showed 9% reported that they have high BP, 82% correctly identified the meaning of Hypertension, although general knowledge and awareness of Hypertension was adequate.[9]

A recent study on knowledge and perceptions about hypertension among neo- and settled-migrants in Delhi, India, demonstrated that knowledge about hypertension was only moderate and comprehensive knowledge was lacking.[10] Another study in Nepal, with regard to the knowledge about heart attack and hypertension, among individuals attending a cardiac camp showed that the respondents were aware of the basic facts regarding myocardial infarction and hypertension. However, lacunae in knowledge were noted, the knowledge scores for hypertension especially were significantly lower among the respondents.(11)

CONCLUSION

These study findings has demonstrated inadequate knowledge among patients with hypertension. And also there is a poor level of awareness about lifestyle behavior modifications which is needed in the control of hypertension among a representative sample of patients. Also study has shown high poor level of perceptions toward lifestyle behavior modification measures. Since lifestyle and diet-related factors are often modifiable, perceptions of their effects have specific importance in control of hypertension.

REFERENCE

1. Bani I.A., Prevalence and Related Risk Factors of Essential Hypertension in Jazan Region, Saudi Arabia., Sudanese Journal of Public Health, 2011; 6(2): pp 45-50.
2. Chavez M.L., Knowledge and Practices on Hypertension of Adults: An Interventional Study by Trained Volunteer Health Workers in Barangay Militar, Tukuran, Zamboanga Del Sur, The Faculty of the Zamboanga Medical School Foundation, I.N.C. Zamboanga City, Doctral Degree of Medicine, 2000, p 3, 20.
3. Leconte M. M. and Ismael V., Teaching Plan for High Blood Pressure Management, College of Technology, New York City, 2012, p 126.
4. Allender J., Rector C. and Warner K., Community Health Nursing: Promoting and Protecting the Public's Health, 7th ed ., New York: Lippincott, Williams & Wilkins, 2010; pp 300.
5. Stamler J, Stamler R, Neaton JD. Blood pressure, systolic and diastolic, and cardiovascular risks: US population data. Arch Intern Med. 1993;153:598–615.
6. Hypertension Detection and Follow-up Program Cooperative Group. Five-year findings of the hypertension detection and follow-up program: I.Reduction in mortality of persons with high blood pressure, including mild hypertension. JAMA. 1979;242:256–71.
7. Pickering TG, James GD, Boddie C, Harshfield GA, Blank S, Laragh JH. How common is white coat hypertension? JAMA. 1988;259:255–8.
8. Gan SK, Loh CY, Seet B. Hypertension in young adults- An under estimated problem.Singapore Med J. 2003;44:448–52.
9. Oliveria, Susan A. Hypertension knowledge, awareness, and attitudes in a hypertensive population.Journal of general internal medicine (2005) 219-225
10. Kusuma YS, Gupta SK, Pandav CS. Knowledge and perceptions about hypertension among neo- and settled-migrants in Delhi, India. CVD Prev Control. 2009;4:119–29.
11. Shankar PR, Partha P, Shenoy N, Chandrasekhar TS, Dubey AK Kathmandu Univ Med J (KUMJ). 2007 Apr-Jun; 5(2):273-8.