

Received : April, 2011; Revised: July, 2011; Accepted : August, 2011

Relationship between socio-economic status and hypertension

V. VINITHA MAMILLA AND T.N. KHAN

ABSTRACT

The present study was conducted to assess the relationship between socio-economic variables and hypertension. The investigation was made for 50 hypertensive subjects selected from parbhani. The selection of sample was done by using stratified random sampling method. The information regarding the socio-economic status of the selected subjects was determined by following the scheduled questionnaire. Findings of the study revealed that majority of the patients lie in the range of 40-55 years, sex wise comparison of the data indicated that prevalence of hypertension was greater among females (64%) than that of males (36%). Findings led to conclude that majority of hypertensive belonged to nuclear families (80%) and middle (34%) and high (38%) income group families than that of joint (20%) and low income (28%) group families, respectively. Literacy status of the study subjects was satisfactory (82%). Findings also indicate greater prevalence of hypertension among sedentary workers (92%). Findings also reveals that majority of males do service (24%) followed by business (12%) whereas in case of females majority were homemakers (54%), followed by business (6%) and service (4%). Approximately, 64 per cent of the hypertensive were vegetarian and follows three meal pattern (60%) whereas 36 per cent were non-vegetarian and 40 per cent subjects follow two meal pattern.

Mamilla, Vinitha V. and Khan, T.N. (2011). Relationship between socio-economic status and hypertension, *Food Sci. Res. J.*, 2 (2): 140-142.

Key Words : Hypertension, Literacy status, Economic status, Food habits

INTRODUCTION

The World Health Organization has estimated that hypertension causes one in every 8 deaths worldwide making hypertension the third leading killer in the world. WHO defines hypertension is a condition in which systolic pressure exceeds 160 mmHg and diastolic pressure 95 mmHg. High blood pressure is not a disease but only a symptom indicating that some underlying disease is processing (Shrilakshmi, 2009). The prevalence of hypertension in india has been reported as 50.9 and 69.9 per 1,000 in males and females, respectively in the urban population, and 35.3 and 35.9 per 1,000 in males and females, respectively in rural population.

Over a period of time, the human race has been taking a wide range of naturally occurring substances as foods. However, in recent times the changes in dietary patterns have probably been too fast for physiological adaptations. The dynamic relationship between changes in people's diet and health is generally seen in the fast changing patterns of certain diseases. With rapid socio-economic development, decreasing trends in infectious diseases due to better health care and consequently longer life expectancy, chronic degenerative diseases are increasing

even in developing countries. The disorders that lead to the processes of atherosclerosis and thrombosis (Coronary artery disease, stroke and peripheral vascular diseases) are generally associated with affluence and consequent alterations in life style such as faulty dietary habits, smoking, alcoholism, tobacco chewing and sedentary living. Available evidence indicates that coronary artery disease, hypertension, diabetes, and obesity are increasing in certain segments of the population, particularly in urban areas (Mahtab *et al.*, 2004).

It is likely that many environmental factors related to socioeconomic circumstances are important in the development and course of hypertension. "We need to take these environmental factors into account both in preventing and treating hypertension" (American Heart Association, 2002). "It is important to look at what factors are related to changes in blood pressure. So looking at how these factors might impact very early changes in blood pressure would be very important from a prevention perspective". The present study was undertaken to assess the prevalence of hypertension among respondents on the basis of their age and sex and to identify relationship between socioeconomic variables and hypertension.

METHODOLOGY

Total 50 hypertensive subjects were selected by stratified random sampling method. Information regarding socio-economic status was collected by interview-cum-questionnaire method.

OBSERVATIONS AND ASSESSMENT

The Age-wise and sex-wise distribution of hypertensive subjects is given in Table 1. The results of the study clearly revealed that the prevalence of hypertension was maximum in the age range of 40 to 55 years also it was found that the major victims of hypertension were female (64%) than that of male (36%).

Table 1: Age-wise and sex-wise distribution of hypertensive subjects

Sr. No	Age groups (yrs)	Male	Female	Total
1.	40-45	2 (4.00)	7 (14.00)	9 (18.00)
2.	46-50	3 (6.00)	11 (22.00)	14 (28.00)
3.	51-55	5 (10.00)	6 (12.00)	11 (22.00)
4.	56-60	4 (8.00)	3 (6.00)	7 (14.00)
5.	61-65	3 (6.00)	4 (8.00)	7 (14.00)
6.	66-70	1 (2.00)	1 (2.00)	2 (4.00)
	Total	18 (36.00)	32 (64.00)	50 (100.00)

Figures in parentheses indicate percentages

Table 2 shows the sex-wise distribution of respondents on the basis of socio-economic variables. The results of the study revealed that 80 per cent of the subjects belonged to nuclear families and 20 per cent of the subjects belonged to joint families. Besides majority (38%) of the hypertensive belonged to high income group followed by middle (34%) and low (28%) income groups. The literacy rate observed was 82% among the studied sample. The sedentary (92%) and moderate (8%) type of activity was performed among the studied subjects. None of the subject doing heavy type of activity was observed. Furthermore the findings led to conclude that prevalence of hypertension was more among the subjects performing the sedentary type of activity than that of moderate activity. The results of Indu *et al.* (2010) are in agreement with the results of the present study.

Findings of the study also indicates that majority of the subjects (54%) were homemakers followed by service (28%) and 18 per cent of subjects were businessman. Two and three meal pattern was followed by 40 and 60 per cent of the subjects, respectively. Majority (64%) of

Table 2: Sex-wise distribution of respondents on the basis of socio-economic variables

Sr. No.	Variables	Male	Female	Total
1.	Type of family			
	Nuclear	15 (30.00)	25 (50.00)	40 (80.00)
	Joint	3 (6.00)	7 (14.00)	10 (20.00)
2.	Family size			
	Upto 6	17 (34.00)	24 (48.00)	41 (82.00)
	Above 6	1 (2.00)	8 (16.00)	9 (18.00)
3.	Literacy status			
	Illiterate	4 (8.00)	5 (10.00)	9 (18.00)
	Primary	1 (2.00)	3 (6.00)	4 (8.00)
	Secondary	4 (8.00)	6 (12.00)	10 (20.00)
	High School	6 (12.00)	14 (28.00)	20 (40.00)
	College	3 (6.00)	4 (8.00)	7 (14.00)
4.	Economic status			
	High income group	5 (10.00)	14 (28.00)	19 (38.00)
	Middle income group	6 (12.00)	11 (22.00)	17 (34.00)
	Low income group	7 (14.00)	7 (14.00)	14 (28.00)
5.	Nature of job			
	Heavy	0 (0.00)	0 (0.00)	0 (0.00)
	Moderate	1 (2.00)	3 (6.00)	4 (8.00)
	Sedentary	17 (34.00)	29 (58.00)	46 (92.00)
6.	Occupation			
	Business	6 (12.00)	3 (6.00)	9 (18.00)
	Service	12 (24.00)	2 (4.00)	14 (28.00)
	Homemaker	0 (0.00)	27 (54.00)	27 (54.00)
7.	Meal pattern			
	Twice	5 (10.00)	15 (30.00)	20 (40.00)
	Thrice	13 (26.00)	17 (34.00)	30 (60.00)
8.	Food habits			
	Vegetarian	12 (24.00)	20 (40.00)	32 (64.00)
	Non-vegetarian	6 (12.00)	12 (24.00)	18 (36.00)

Figures in parentheses indicate percentages

the selected subjects were vegetarian while 36 per cent of the selected subjects were non vegetarian.

On the whole, it can be concluded that most of the subjects were belonging to high income, nuclear family and highly educated. It also reveals that majority of them were sedentary workers, vegetarians and follow three meal pattern.

Address for correspondence :

V. VINITHA MAMILLA

Department of Foods and Nutrition,
College of Home Science, Marathwada Agricultural University,
PARBHANI (M.S.) INDIA
E-mail: vinithamamilla@gmail.com

Authors' affiliations :

T.N. KHAN

Department of Foods and Nutrition,
College of Home Science, Marathwada Agricultural University,
PARBHANI (M.S.) INDIA
E-mail: k_naheed@rediffmail.com

Indu, Kumar Anant and Kumari, Asha (2010). A study on socio-economic status of hypertensive patients. *Asian J. Home Sci.*, **5**(1):149-150.

Mahtab, S., Bamji, N., Rao, Pralhad and Reddy, Vinodini (2004). *Diet and coronary heart disease. A text book of Human Nutrition.* pp. 341-342.

Shrilakshmi, B. (2009). *Diet in heart disease. Text book of dietetics.* pp. 207.

LITERATURE CITED

American Heart Association (2002). Socioeconomic factors affect blood pressure. [http:// www.science blog.com/ community](http://www.scienceblog.com/community).

