

Medical History and Associated symptoms of Essential Hypertensive Subjects Joining Naturopathy Centers in North India



Nutan

Assistant Professor,
Deptt. of Food and Nutrition,
Bhagat Phool Singh Mahila
Vishvavidyalaya
Khanpur Kalan,
Haryana, India

Abstract

People are getting aware about their health in developing countries like India and adopting non drug therapies to control their disorders rather than switching towards the liberal use of allopathic chemical based drugs. Keeping this in mind a survey was conducted in three naturopathy centers of north India namely *Prakritik Jeevan Kendra, Pattikalyana, G.T. Road, Panipat and Navneet Prabhakar YogChikitsa Dham, Bassi, Jaipur, Rajasthan, Kailash ashram*, New Delhi. For the purpose of study 30 hypertensive male and equal number of female were selected from these naturopathy centers. Dietary information was collected through a questionnaire cum interview method. Blood pressure measured at the time of joining Naturopathy Center. Nearly half (45%) of the subjects were undergoing any kind of treatment.

One third of the patients showed positive family of hypertension. This disorder transferred almost equally well from both the maternal as well as paternal side. Common associated symptoms among essential hypertensive subjects was Cardiac Ailments, Diabetes Mellitus and Asthama/Bronchitis. Furthermore, diet is the most preferred mode of treatment adopted by the hypertensive adults. Mass population still believe in the non-drug therapies of yoga and exercise for the treatment of hypertension irrespective of their social, economic and gender profile.

Keywords: Hypertension, Naturopathy, Dietary Habits etc.

Introduction

Lifestyle disorders have slowly but firmly established their foot hold in this mechanized era. Widespread adoption of unhealthy lifestyle has worsened the situation further. Compared with the year 2000, the number of adults with hypertension are predicted to increase by 60% to a total of 1.56 billion by year 2025 (Kearney et al, 2005).

Review of Literature

Hypertension is indeed a bag full of numerous ailments like stroke and myocardial infarction etc. It affects the entire spectrum of population including men, women and even children (Valerio et al, 2016), rich and poor. All the socioeconomic stratas can not afford the costly treatment for hypertension. So, they turn towards a variety of ways and means to deal with this common ailment. Present study is an effort to give them information about a number of lifestyle changes, use of herbs, family history, medical practices adopted and the duration of these changes etc. It can provide an outlook towards a plethora of ways to deal with hypertension.

Materials and Methods

Sampling

By purposive sampling technique, 30 hypertensive male and equal number of hypertensive female who enrolled themselves in naturopathy centers for the treatment of hypertension.

Location

Subjects were selected from naturopathy centers namely - *Prakritik Jeevan Kendra, Pattikalyana, G.T. Road, Panipat and Navneet Prabhakar YogChikitsa Dham, Bassi, Jaipur, Rajasthan*. The age of the subjects was between 40-60 years. This treatment was done in naturopathy centers for one month. In naturopathy centers subjects were doing yoga (i.e. exercise and pranayam). Along with this they were under

going mud, water and diet therapies accordingly. They were given herbal tea, honeyamla water or bottle guard juice to drink in fasting state according to their adjacent complications.

Collection of General Information

General information of the subjects was collected by pretested questionnaire before commencing the experimental trial at naturopathy center the general information regarding essential hypertension was collected including dietary habits and personal habits by questionnaire cum interview method. Preliminary prepared performa was carried out on 10 subjects to test the reliability and validity of these performa and modified one was used to collect the desired data related to the dietary habits like meal consumption pattern as well as fat, salad and milk consumption habits, name of the naturopathy center in which they have enrolled.

Blood Pressure

Blood pressure was measured on left arm by auscultatory method using mercury

sphygmomanometer. The individual was made comfortable and seated at least for five minutes in the chair before measurement. Two readings were taken half an hour apart and the average of two was taken (WHO, 2004). Hypertension was defined as systolic blood pressure (SBP) >140 mm Hg and diastolic blood pressure (DBP) >90 mmHg as per US Seventh Joint National Committee on detection, evaluation and treatment of hypertension (JNC VII) criteria (2003).

Statistical Analysis

Data for blood pressure was statistically analysed to calculate the mean and S.D.

Results and Discussion

Hypertensive state of the Subjects

All the subjects under study were diagnosed hypertensives as per the criteria of Joint National Committee (2003) with the mean SBP (Systolic Blood Pressure) of 162.51 mm Hg and DBP (Diastolic Blood Pressure) of 105.49 mm Hg as revealed in the Table 1

Table 1: Blood pressure (Mean + S.D.) of the hypertensive human subjects at joining naturopathic treatment

Parameters	Blood Pressure (mm Hg) (Mean + S.D.)
SBP (Systolic Blood Pressure)	157.20± 19.86
Male (n=30)	166.99 ± 23.83
Female (n=30)	162.51± 22.27
Total (N=60)	
DBP (Diastolic Blood Pressure)	106.29± 15.20
Male (n=30)	104.81± 11.62
Female (n=30)	105.49± 13.25
Total (N=60)	

Medical History of Essential Hypertensive Subjects

Work Involving Traveling

The work of 61.64 per cent subjects involved traveling.

Age of Onset

Age of onset of essential hypertension in maximum (48.31%) subjects was 40-50 years, where as 38.32 per cent developed this ailment at 50-60 years of age and only 13.33 per cent became the victim of essential hypertension at 30-40 years of age.

Regularity of Blood Pressure and Blood Test

Majority of subjects i.e. all male subjects (n=30) and 96.63 per cent of female were regular in their blood pressure and blood test examination.

Family History

Thirty per cent of essential hypertensive subjects from grand total population show positive family history of hypertension. Genderwise, 26.66 per cent of male and one third of female subjects were having positive family history of essential hypertension.

Table 2: Medical history of Essential Hypertensive Subjects

Variable	Male (n=30)		Female(n=30)		Total(N=60)	
	No. of subjects	%age	No. of subjects	%age	No. of subjects	%age
a. Work involve traveling						
1. Yes	19	63.33	18	60	37	61.64
2. No	11	36.66	12	40	23	38.32
b. Age of onset						
1. 30-40	2	6.66	6	20	8	13.33
2. 40-50	16	53.33	13	43.33	29	48.31
3. 50-60	12	40	11	36.66	23	38.32
c. Regularity of Blood Pressure and blood test						
1. Yes	30	100	28	93.32	58	96.63
2. No	--	--	2	6.66	2	3.33
d. Family history						
1. Yes	8	26.66	10	33.33	18	30
2. No	22	93.32	20	66.66	32	53.81
e. If yes, it is from						
1. Both paternal and	12	40	17	56.66	29	48.31

maternal side						
2. Paternal side/ maternal side	18	60	13	43.33	31	51.65
f. Previous treatment						
1. None	11	36.66	16	52.33	27	45
2. Allopathic	3	10	2	6.66	5	8.33
3. Homeopathic	1	3.33	1	3.33	2	3.33
4. Ayurvedic	--	--	1	3.33	1	1.66
5. Yoga and exercise	15	50	10	33.33	25	41.65
g. Treatment aspect						
1. Diet	27	90	28	93.32	55	91.63
2. Drugs	3	10	2	6.66	5	8.33
h. Herb used						
1. No herb used	26	86.66	28	93.32	54	90
2. Bottle guard juice	4	13.33	1	3.33	5	8.33
3. <i>Belgiri juice</i>	--	--	--	--	--	--
4. <i>Sarpgandha</i>	--	--	1	3.33	1	1.66
i. Duration of use	(n=4)		(n=2)		(n=6)	
1. 1 month	1	25	1	3.33	1	16.66
2. 1 year	--	--	1	3.33	2	33.33
3. > 1 year	3	75	--	--	3	50

Paternal / maternal side

More or less, the same proportion of subjects were having family history of either both sides (48.31%) or from paternal/ maternal side (51.65%).

Previous Treatment

Forty five per cent of the total selected hypertensive subjects had not opted any previous treatment. Out of the subjects who had undergone any kind of previous treatment, maximum considered non drug therapies yoga and exercise (41.65%) and next was allopathic 3 (8.33%) followed by homeopathic (3.33%) and ayurvedic (1.66%) treatment.

Treatment Aspect

Diet (91.63%) was the preferred method of treatment as compared to drugs (8.33%) out of these two options.

Herbs Used

Ninety per cent of the subjects from both sexes were not using any herb (90%). The most

Associated symptoms of essential hypertensive subjects

Symptoms	Male (n=30)		Female(n=30)		Total(N=60)	
	No. of subjects	%age	No. of subjects	%age	No. of subjects	%age
Chest pain	15	50	10	33.33	25	41.65
Sweating	5	16.67	12	40	17	28.32
Giddiness	10	33.33	8	26.66	18	30
Weakness	12	40	18	60	30	50
edema	1	3.33	--	--	1	1.66
Restlessness	15	50	21	70	36	59.98
Head ache	30	100	28	93.32	58	96.63
Palpitation	--	--	2	6.66	2	3.33
Tightness of chest	11	36.66	19	63.33	30	50
Blurred Vision	5	16.67	2	6.66	7	11.66
Any other	3	10	5	16.67	8	13.33

Nature of associated disease with which the essential hypertensive subjects were suffering from

As a consequence of hypertension, 41.65 per cent subjects were suffering from cardiac ailments followed by diabetes mellitus (15%), asthma

common herb used by hypertensive subjects was bottle guard juice (8.33%). Only single female subject was using *sarpgandha* herb, whereas none of the subject reported to take *belgiri* juice.

Duration of Use

From total six subjects using herbs, half were taking herbs for more than one year, two for nearly one year and only a single subject has initiated herbs consumption from last one month only.

Associated Symptoms of Essential Hypertensive Subjects

Headache was the most common symptom present (96.63%) followed in the decreasing order of sequence by restlessness (59.98%). However, half of the subjects were suffering from weakness and equal proportion with tightness of chest followed by chest pain (41.65%), giddiness (30%), sweating (28.32%), other symptoms including palpitation (13.33%) and blurred vision (11.66%). Only a single subject was suffering from edema.

(11.66%) and joint pains (8.33%). An equal number of subjects (1.66% each) were suffering from arthritis and kidney stone. However, none of the female subjects reported to suffer from kidney stone and none of them was suffering from piles etc.

Table 3: Nature of associated diseases with which the essential hypertensive subjects were suffering from

Diseases	Male (n=30)		Female(n=30)		Total(N=60)	
	No. of subjects	%age	No. of subjects	%age	No. of subjects	%age
Cardiac Ailments	15	50	10	33.33	25	41.65
Diabetes Mellitus	6	20	3	10	9	15
Arthritis	--	--	1	3.33	1	1.66
Joint Pain	3	10	2	6.66	5	8.33
Asthama/Bronchitis	4	13.33	3	10	7	11.66
Kidney Stones	--	--	1	3.33	1	1.66
Any Other (Piles)	--	--	--	--	--	--

Conclusion

It is clearly visible from the results of present survey that non drug based dietary approaches are the most preferred mode of treatment followed by yoga and exercise. This indicates that there is a vast scope of flourishing nonpharmacological approaches as an integrated healing strategy to combat hypertension and other lifestyle disorders as well as to avoid the occurrence of hypokinetic diseases among the masses adopted by the subjects.

References

Gopalan C, Ramasatri BV, Balasubramanian SC revised and updated by Longvah T., Anandnathan R, Bhaskarachary A, K Vankaiah (2017). *Indian Food Composition Tables*. Hyderabad: National Institute of Nutrition, ICMR.

<http://www.nhlbi.nih.gov/guidelines/hypertension/express.pdf>. 15/11/2003 JNC VII Express (2003) Prevention, detection, evaluation and treatment of high blood pressure

ICMR(2011) *Dietary Guidelines for Indians-A Manual*, 2nd Edition, NIN, Hyderabad. pp 10, 86-90,92

James WPT, Anna Ferro-Lyzzzi, Waterlow JC (1988) *Definition of chronic energy deficiency in adults- report of working party of intervention dietary energy consultation group*. *Am J Clin Nutr*. 42 : 969-981.

Jelieff DB (1966) *The assessment of the nutritional status of the community*. World Health Organisation (Monograph Series No. 53).

Ranasinghe Priyanga, Cooray Dalini N, Jayawardena Ranil and Katulanda Prasad (2015) *The influence of family history of hypertension on disease prevalence and associated metabolic risk factors among Srilankan Adults*. *BMC Public Health*.15: 576

VALERIO Association of family history with cardiovascular disease in hypertensive individuals in Multiethnic Population

WHO (2004) Luepker RV, Evans A, Mc Keigue P, Reddy KS (2004) *Cardiovascular Survey Methods* (3rd ed) Geneva. p 147.