



CROSS SECTIONAL STUDY ON " KURUTHLAZHAI NOI" (HYPERTENSION) REPORTING IN NATIONAL INSTITUTE OF SIDDHA OPD

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**ABSTRACT**

Many disease are emerging as a trend of life style modifications due to stress, secondary life style and food habits , one among them Hypertension. It is an important public health problem in both economically developed and developing nations.Kuruthiazhalnoi is the pitham dominant disease which is caused due to imbalance of pitham in human body due to dietary modifications. This condition may be comparable with Hypertension in modern text. This study was a Hospital based cross-sectional study conducted in NIS OPD among 200 subjects selected using Non-randomized sampling method. Hypertension was significantly higher in individuals more than 35 years and who take alcohol, smoking and in subjects with raised cholesterol level. In this observational study the result shows that 40.5% (81patients) got improved overall there was both reduction of symptoms and blood pressure in siddha with allopathy medication, 6%(12patients) not improved ,then 53.5%(107patients) are not having awareness about the treatment of Hypertension in siddha at NIS.

**KEYWORDS :** Hypertension, Kuruthiazhalnoi,pitham, A Cross sectional study.

**INTRODUCTION:**

Primary hypertension is the most common type of hypertension, affecting 95% of hypertensive patients. It has no identifiable cause. It is the primary cause of stroke, coronary artery disease and sudden cardiac death. In worldwide, the majority of diagnosed hypertensive patients are inadequately controlled.

Approximately 20% of the worlds adults are estimated to have hypertension, when hypertension is defined as blood pressure in excess of 140/90mm Hg. The prevalence dramatically increases in patients older than 60 years. In many countries , 50% of individuals in this age group have hypertension. World wide approximately one billion people have hypertension, contributing to more than 7.1 million deaths per year.

**MATERIALS AND METHODS:**

This is a hospital based cross sectional study in which 200 hypertension patients reported in national institute of siddha are selected by checking their blood pressure, patients are given with a set of questionnaire about their personal history, such as food habits, hobbies, occupational and socio economic status, level of stress, depression, treatment history , family history and also their disease history

This study was approved by Institutional Ethical Comity of National Institute of Siddha , and registered in Clinical trials registry in india.

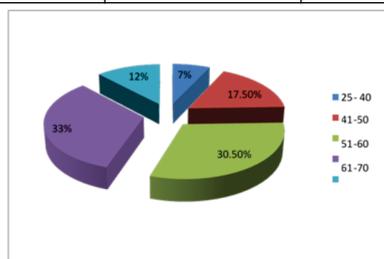
**RESULTS**

**TABLE 1 - AGE DISTRIBUTION:**

Distribution of age in hypertension patients:

AGE	NO OF PATIENTS	PERCENTAGE
25- 40	14	7%
41-50	35	17.5%
51-60	61	30.5%

61-70	66	33%
ABOVE70	24	12%

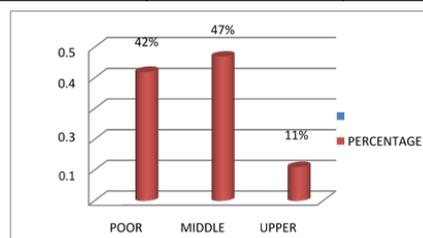


In 200 patients , 7% are included in the age group of 25-40, 17.5% are 41-50age group, 30.5% are 51-60 age group and 12% are above 70 age group.

**TABLE 2: SOCIO ECONOMIC STATUS**

Distribution of socio economic status in hypertension patients:

ECONOMIC STATUS	NO OF PATIENTS	PERCENTAGE
POOR	84	42%
MIDDLE	94	47%
UPPER	22	11%

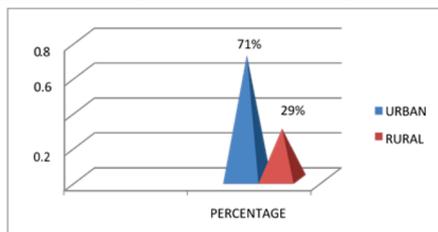


Out of 200 patients 42% are from poor family, 47% are from middle class family, then only 11% of patients are from upper class .

**TABLE 3 – NATURE OF LIVING:**

Distribution of hypertension patients according to nature of living:

NATURE OF LIVING	NO OF PATIENTS	PERCENTAGE
URBAN	142	71%
RURAL	58	29%

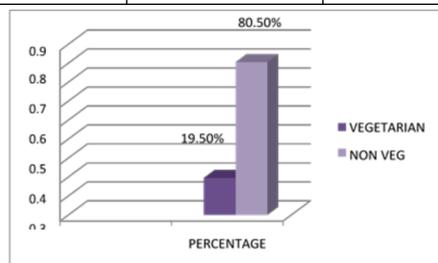


Out of 200 patients, 71% are from urban area and 29% are from rural area.

**TABLE 4 – DIETARY HABITS:**

Distribution of hypertension patients according to dietary habits:

DIET	NO OF PATIENTS	PERCENTAGE
VEGETARIAN	39	19.5%
NON VEG	161	80.5%

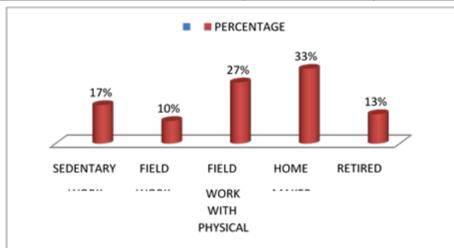


Out of 200 patient 80.5% are non-vegetarian, only 19.5% are vegetarian.

**TABLE 5 - OCCUPATIONAL HISTORY:**

Distribution of hypertension patients according to occupational history:

OCCUPATION	NO OF PATIENTS	PERCENTAGE
SEDENTARY WORK	34	17%
FIELD WORK	20	10%
FIELD WORK WITH PHYSICAL LABOUR	54	27%
HOME MAKER	66	33%
RETIRED	26	13%



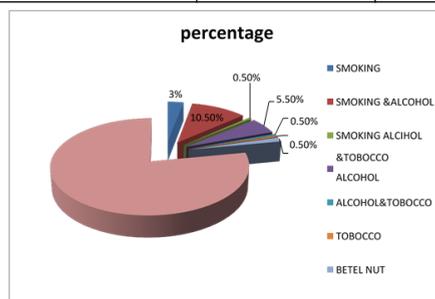
Out of 200 patients 17% patients are in sedentary work, 10% are in field work, 27% are in field work with physical activity, and 33% are in house hold work and 13% of patients are retired people.

**TABLE 6 – PERSONAL HABITS:**

Distribution of hypertension patients according to personal habits:

HABITS	NO OF PATIENTS	PERCENTAGE
SMOKING	6	3%
SMOKING &ALCOHOL	21	10.5%

SMOKING ALCIHOH &TOBOCCO	1	0.5%
ALCOHOL	11	5.5%
ALCOHOL&TOBOCCO	1	0.5%
TOBOCCO	1	0.5%
BETEL NUT	3	1.5%
No bad habits	156	78%

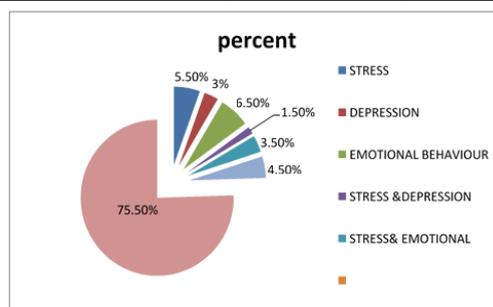


Out of 200 patients, 3% patients are smokers, 10.5% patients had the habit of smoking with alcohol, 0.5% patients had the habit of smoking alcohol and tobacco chewing, 5.5% patients had the habit of alcohol, 0.5% patients had the habit of alcohol with tobacco chewing, 1.5% patients had the habit of tobacco chewing and 78% patients were not having no other addictions.

**TABLE 7 – PSYCHOLOGICAL EVALUATION:**

Distribution of hypertension patients according to psychological evaluation:

PSYCHOLOGICAL EVALUATION	NO OF PATIENTS	PERCENTAGE
STRESS	11	5.5
DEPRESSION	6	3
EMOTIONAL BEHAVIOUR	13	6.5
STRESS &DEPRESSION	3	1.5
STRESS& EMOTIONAL	7	3.5
STRESS, DEPRESSION& EMOTIONAL BEHAVIOUR	9	4.5
No psychological illness	151	75.5

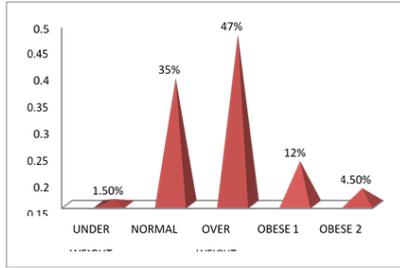


Out of 200 patients, 5.5% of patients having stress, 3% of patients having depression, 6.5% of patients having emotional behaviour, 1.5% of patients having stress with depression, 3.5% of patients having stress with emotional behaviour, 4.5% of patients having stress, depression and emotional behaviour and 75.5% of patients not having any other psychological problems.

**TABLE 8 – BODY MASS INDEX:**

Distribution of hypertension patients according to body mass index:

BMI	NO OF PATIENTS	PERCENTAGE
UNDER WEIGHT	3	1.5%
NORMAL	70	35%
OVER WEIGHT	94	47%
OBESE 1	24	12%
OBESE 2	9	4.5%

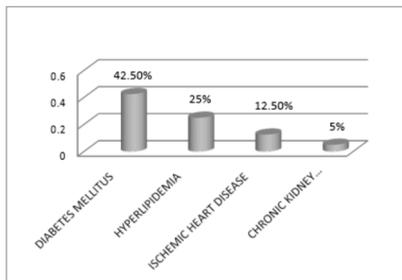


Out of 200 patients 1.5% are comes under weight and their BMI is 17-18.5, 35% are normal weight and their BMI is 18.5-25,47% are comes under over weight and their BMI is 25-30, 12% are comes under obese class 1 and their BMI is 30-35 and Only 4.5%of patients are obese class 2 and their BMI is 35-40.

**TABLE 9 – ASSOCIATED DISEASE :**

Distribution of hypertension patients according to associa ted disease:

ASSOCIATED DISEASE	NO OF PATIENTS	PERCENTAGE
DIABETES MELLITUS	85	42.5%
HYPERLIPIDEMIA	50	25%
ISCHEMIC HEART DISEASE	25	12.5%
CHRONIC KIDNEY DISEASE	10	5%

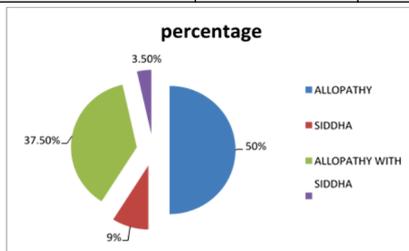


Out of 200 patients, 42.5% of patients are having diabetes mellitus, 25 % of patients having hyperlipidemia, 12.5% of patients having ischemic heart disease, and 5% of patients having chronic kidney disease.

**TABLE 10 – TREATMENT HISTORY:**

Distribution of hypertension patients according to treatment history:

TREATMENT HISTORY	NO OF PATIENTS	PERCENTAGE
ALLOPATHY	100	50%
SIDDHA	18	9%
ALLOPATHY WITH SIDDHA	75	37.5%
NO TREATMENT	7	3.5%

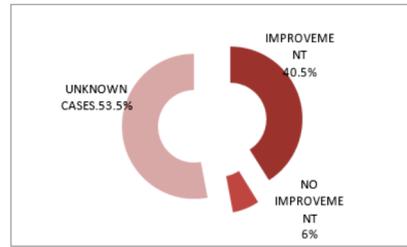


Out of 200 patients , 50% of patients taking allopathy treatment , 37.5% of patients taking siddha with allopathy treatment , 9% of patients taking siddha treatment and 3.5% of patients are not taking any treatment.

**TABLE 11 – IMPROVEMENT HISTORY:**

Distribution of hypertension patients according to improvement:

IMPROVEMENT HISTORY	NO OF PATIENTS	PERCENTAGE
IMPROVEMENT	81	40.5%
NO IMPROVEMENT	12	6%
UNKNOWN CASES	107	53.5%



Out of 200 patients, 40.5% of patients are improved in siddha with allopathy treatment , and only 6% of patients not improved , 53.5% of patients not having awareness in siddha treatment.

**DISCUSSION:**

High blood pressure (BP) is ranked as the third most important risk factor for attributable burden of disease in south Asia (2010) . Hypertension (HTN) exerts a substantial public health burden on cardiovascular health status and healthcare systems in India . HTN is directly responsible for 57% of all stroke deaths and 24% of all coronary heart disease (CHD) deaths in India . The WHO rates HTN as one of the most important causes of premature death worldwide . The Global and Regional Burden of Disease and Risk Factors study (2001), in a systematic analysis of population health data for attributable deaths and attributable disease burden, has ranked HTN in south Asia as second only to child underweight for age .

In an analysis of worldwide data for the global burden of HTN, 20.6% of Indian men and 20.9% of Indian women were suffering from HTN in 2005 . The rates for HTN in percentage are projected to go up to 22.9 and 23.6 for Indian men and women, respectively by 2025 . Recent studies from India have shown the prevalence of HTN to be 25% in urban and 10% in rural people in India . According to the WHO 2008 estimates, the prevalence of raised BP in Indians was 32.5% (33.2% in men and 31.7% in women) . However, only about 25.6% of treated patients had their BP under control, in a multicenter study from India on awareness, treatment, and adequacy of control of HTN .

Out of 200 patients 63.5% of patients comes under the age category of 51-70, and about 57% are males and 43% of patients female. 27% of patients are in field work with physical labour is the trending pattern of occupation. Another significant finding is 47% of patients are middle class, 80.5% are non-vegetarians, only 22% of patients having smoke, alcohol, tobacco and betel nut chewing habits and 24.5% of patients having psychological problems, 47% are over weight, 42.5% of patients having diabetes , 25% having hyperlipidemia, 12.5% having ischemic heart disease, 5% having chronic kidney disease. 50% of patients taking allopathy treatment, 37.5% of patients taking siddha with allopathy treatment, only 9% of patients taking siddha treatment. And 40.5%of patients improved in siddha with allopathy treatment and 6% not improved , 107 patients not having awareness in siddha treatment.

**CONCLUSION:**

In this observational study the result shows that 40.5% (81patients) get improved overall there was both reduction of symptoms and blood pressure in siddha with allopathy medication, 6%(12patients) not improved ,then 53.5%(107patients) are not having awareness about the treatment of Hypertension in siddha at NIS.

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