



## ASSESS THE KNOWLEDGE REGARDING NON PHARMACOLOGICAL MANAGEMENT OF HYPERTENSION AMONG PATIENTS AT A SELECTED PRIMARY HEALTH CENTRES, AT KASHMIR.

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### Abstract

#### Background of the study:

Non pharmacological treatments are an important aspect of hypertension care. It consists of various lifestyle adjustments such as specific foods and a reduction in salt, alcohol, and saturated fat. Weight loss, increased physical activity, and time-restricted meals have also been reported to be useful. Traditional therapies such as yoga, acupuncture, and transcendental meditation can be beneficial.

#### Objectives of the Study

1. To Assess the level of knowledge regarding non pharmacological management of hypertension
2. To determine association between the knowledge scores regarding non pharmacological management of hypertension with their selected demographic variables.

**Method:** This was non experimental study total 40 subjects were selected through non probability convenience sampling technique. Descriptive research design was used. Data was collected by structured interview technique. Data collected under the 2 sections (socio-demographic data, knowledge questionnaire).

**Result:** The overall knowledge levels of hypertension patients on non-pharmacological management of hypertension. In pretest 16 (40%) of the hypertension patients had average knowledge only and remaining 24(60%) had Poor knowledge. demographic variable like Age, Gender, religion, occupation, type of family, family monthly income, source of information about hypertension had shown no statistically significant association with the levels of knowledge regarding Non pharmacological management of hypertension among patients, educational status of patients significant with hypertension patients with.  $P < 0.05$ .

**Conclusion:** The study proved that health instructional module on hypertension patients and its non-pharmacological management of hypertension was scientific, logical and cost effective strategy.

**Keywords:** Knowledge, Hypertension, Patients, Health centre

### Introduction:

Hypertension is a major preventable cardiovascular risk factor that has an impact on health, sickness, and death.[1]It is found in the majority of developed, underdeveloped, and developing

countries. The incidence in Asia ranges from 20.8% in Taiwan to 50.3% in Pakistan. The prevalence of hypertension in India is approximately 29.8% (95% confidence interval: 26.733.0). (This is also the case in my paper.) There are significant disparities in occurrence between rural and urban locations. [2]

Hypertension is one of the most frequent noncommunicable diseases treated in primary care, and if not adequately managed, it can lead to a variety of significant complications such as myocardial infarction, stroke, renal failure, and death. It is a leading cause of cerebrovascular (51%) and cardiovascular (45%) mortality. A 5 mm Hg SBP reduction was found to be associated with mortality reductions of 14% from stroke, 9% from heart disease, and 7% from allcause mortality.[3] In 2017, the most recent American recommendations on hypertension therapy established a lower blood pressure threshold of 130/80 mmHg as the cutoff point for a diagnosis of hypertension. Despite the fact that this lower diagnostic criterion was imposed much to the chagrin of many practitioners, American guidelines do not prescribe pharmaceutical therapy for such persons diagnosed with hypertension.[4] In fact, it was clearly stated that lifestyle changes be implemented at this stage and that only individuals with a worldwide CV risk of 10% be treated pharmacologically in addition to lifestyle changes. Nonpharmacological management was advised because there is solid data supporting the use of nonpharmacological strategies for lowering blood pressure.[5] Weight loss, dietary changes, increased physical activity, and alcohol consumption are examples of nonpharmacological alterations. Other interventions investigated include smoking cessation, meditation, acupuncture, biofeedback, home monitoring, dietary supplements (e.g., garlic, cocoa, vitamin C, coenzyme Q10, omega3 fatty acids, calcium, potassium, and magnesium), and the use of continuous positive airway pressure for patients with obstructive sleep apnea[6].

To reduce blood pressure, adults should engage in moderate to strenuous aerobic physical exercise at least four times per week for an average of 40 minutes per session. The majority of health advantages have been associated with at least 150 minutes per week of moderate intensity physical exercise, such as brisk walking. Some physical activity is preferable to none, and more action yields higher advantages. Exercise has been shown to lower rates of all cause mortality, coronary heart disease, and hypertension.[7]

## **Material and Methods**

**Study area and period:** Study conducted at selected primary health centers AT Kashmir

### **Study design**

A hospital based descriptive research design was conducted

### **Inclusion criteria and Exclusion criteria:**

**Inclusion Criteria:** The study includes the hypertension patients who are:

- i.) Able to understand and read/write Kashmir,
- (ii). Available at the time of data collection,
- (iii). willing to participate in the study.

**Exclusion Criteria:** The study excludes the hypertension patients who are:

- (ii) Cannot understand and read/write Kashmir,
- (iii) Are suffering from chronic diseases.
- (iv) are not willing to participate in the study

### **Sample size determination**

40 hypertension patients in selected primary health centers at Kashmir were considered as sample for the present study.

### **Operational definition**

**Assess:** In this study it refers to evaluating the level of the knowledge regarding non pharmacological management of hypertensive patients.

**Knowledge:** It refers to awareness and familiarity about lifestyle modification for hypertensive patients which is measured by self-structured questionnaire.

**Hypertensive patients:** Patient having systolic blood pressure (SBP) of 140 mm Hg or more, or a diastolic blood pressure (DBP) of 90 mm Hg or more.

**Non pharmacological management:** Including natural remedies, traditional medicine, complementary treatments, and supportive care.

**Primary Health centre:** Health systems to support a person's health needs – from health promotion to disease prevention, treatment, rehabilitation,

### **Selected Variables**

Variable is an attribute of a person or object that varies and that which taken on different values.

### **Dependent variable**

The outcome of interest. The variable that is hypothesized to depend on or caused by another variable.<sup>(21)</sup>

In this study the knowledge among hypertension patients regarding non pharmacological management was considered as dependent variable.

### **Independent Variable**

The variable that is believed to cause or influence the dependent variable.

In this study the Age, Gender, education, type of family, monthly income, source of information was considered as independent variable.

### **Assumptions**

It refers to the beliefs that are held to be true, but have not necessary to be proven<sup>21</sup>. The present study was assumed that:

1. The knowledge regarding non pharmacological management of hypertension will help the patients reducing hypertension.
2. Hypertension patients will help to reduce blood pressure.
3. Hypertension patients will have interest to participate in the study.

### **Population**

Population is a complete set of persons or objects that possess a common characteristic that is of interest to the researcher.

The target population of the present study was refers to the Hypertension patients attending at selected primary health centre.

### **Sample**

Sample is a subset of population, selected to represent the population.

In present study the sample consists of 40 Hypertension patients in selected Primary health centers at Kashmir.

### **Sampling Technique**

Sampling is a process of selecting the portion of the population to represent the entire population.

Convinence Sampling Technique was used to select the sample for the present study

### Sample Size

40 hypertension patients in selected primary health centers at Kashmir were considered as sample for the present study.

### Data collection instrument and procedure

Structured and semi-structured English version questionnaire was prepared from the literature review by principal -investigators. Translation to Hindi version and again translated to English version were used by the principal investigators before starting the data collection time. It includes about antenatal mothers socio-demographic factors, non-pharmacological management of hypertension.

**Data collection instrument and methods:-**The data collector was the group members. Face to face interview held privately after verbal consent is obtained from each participant. The data was collected until the required sample size achieved.

### RESULT:

**Table 1:** Frequency distribution of hypertension patients according to their socio demographic characteristics.

N = 40

Socio-Demographic variables	No of respondents(f)	% of respondents
<b>Age (in years)</b>		
31-40	21	53
41-50	10	25
51-60	5	13
>61	4	10
<b>Gender</b>		
Male	25	63
Female	15	37
<b>Educational status</b>		
No formal education	2	5.00
Primary education	10	25
Secondary Education	10	25
Higher secondary	10	25
Graduation and above	8	20
<b>Occupation</b>		
House wife	10	25.00
Coolie	16	40.00
Government employee	6	15.00
Private employee	8	20.00
<b>Family Income(monthly)</b>		
< 5000	10	25
6000-10,000	24	60.00
>11, 000	6	15.00
<b>Marital status</b>		
single	16	40
Married	20	50
Widow	2	5
Divorced	2	5
<b>Source of Information</b>		
News paper	4	10.00
Mass media	10	25.00
Magazine	6	15.00
Others	20	50.00

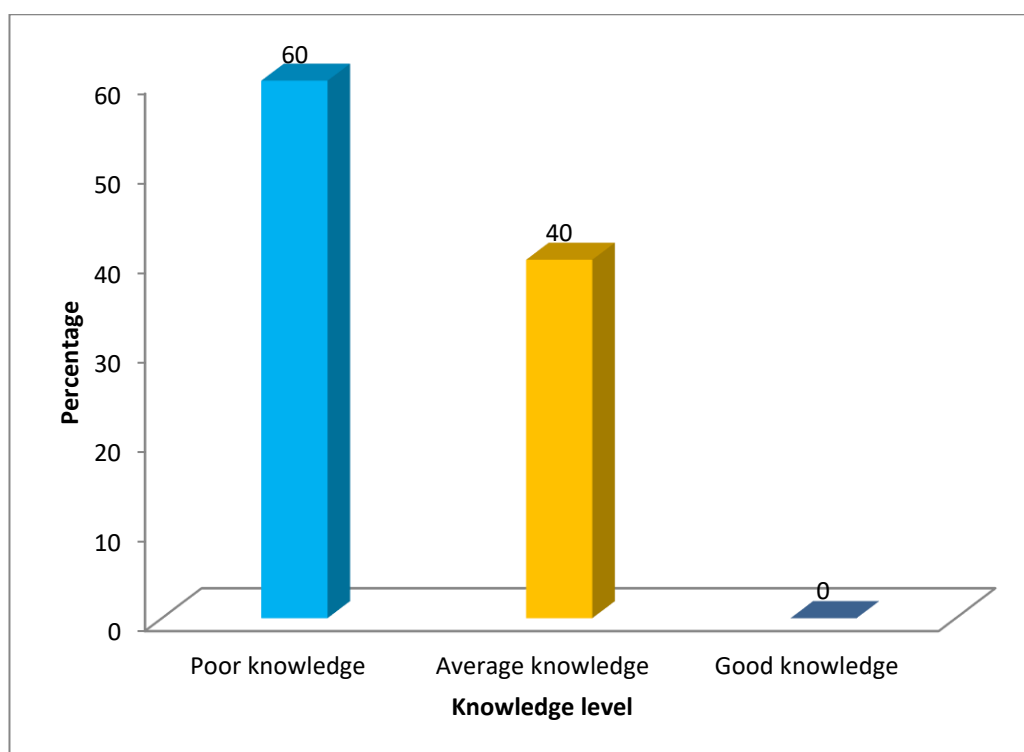
Table.1 Represents the percentage distribution of study subjects. As per age out of 40 subjects, 21(53%) of the subjects belong to 31-40 years, followed by 10(25 %) in the age group of 41-50 years and 5(13 %) were 51-60 years and 4(10%) were above 61 years of age. Regarding gender of patients 25(63%) were male and 15(37%) were female. Out of 40 subjects, 2(5%)of the subjects had no formal education, 10(25%) up to primary education, 10(25%) had secondary education, 10(25%)had Higher secondary, 8(20%) were graduation and above. Occupational status of subject 10(25%) were housewives, 16(40%) were coolie, 6(15%) were government employee, and remaining 8(20%) of the subjects were private employee. 10(25%) subjects had an income of >Rs5000/-, followed by 24(60%) subjects with income between Rs. 6000/-10,000/-,6(15%) had Rs.1100/-and above.

Majority-20 (50%) of subjects were married 16(40%) were single,2(5%) were widow and 2(5%) were divorced. The following diagram represents the percentage distribution of study sample by source of information regarding health. 4(10%) subjects were getting information from news paper, followed by 10(25%) subjects were getting from mass media,6(15%) were getting from magazine and 20(50%) were getting from others like friends, neighbors, relatives, etc.

**TABLE 2:** Percentage distribution of knowledge levels of hypertension patients  
N = 40

Levels of knowledge	Frequency	Percentage
	Good knowledge	00
Average knowledge	16	40
Poor knowledge	24	60

Table 2 presents the overall knowledge levels of hypertension patients on non-pharmacological management of hypertension. In pretest 16 (40%) of the hypertension patients had average knowledge only and remaining 24(60%) had Poor knowledge.



**Fig no. 1** Percentage distribution of hypertension patients by their knowledge on non pharmacological management of hypertension.

**Table 4:** Association between knowledge scores and selected socio demographic variables

variables		Knowledge level			Total	Chi square df	P value
		Poor	Average	Good			
Age (In Year)	31-40	9	6	0	15	1.669 2	0.199 NS
	41-50	10	3	0	13		
	51-60	3	2	0	5		
	>61	2	5	0	7		
Gender	Male	13	10	0	23	2.523 3	0.285 NS
	Female	11	6	0	17		
Religion	Hindu	12	10	0	22	0.584 2	0.178 NS
	Muslim	6	4	0	10		
	sikh	6	2	0	8		
Marital status	single	5	2	0	7	0.163 6	0.272 NS
	Married	10	11	0	21		
	Widow	6	1	0	7		
	Divorced	3	2	0	5		
Occupational status	House wife	10	26	0	9	0.216 2	0.158 NS
	Servant	4	4	0	11		
	Private employee	5	6	0	19		
	Government employee	5	6	0	6		
Family monthly income	< 5000	4	4	0	8	3.373 2	0.818 NS
	6000-10,000	5	3	0	8		
	11, 000	14	9	0	23		
Educational status	No formal education	6	2	0	8	1.714 3	0.003*S
	Primary education	5	4	0	9		
	Secondary Education	7	4	0	11		
	Higher secondary	4	3	0	7		
	Graduation and above	2	3	0	5		
Source of information regarding health	News paper	13	9	0	22	0.155 3	0.979 NS
	Mass media	6	2	0	8		
	Magazine	4	4	0	8		
	Others	1	1	0	2		

\* $p < 0.05$  indicates significant association, NS- Not- significant.

The table 4 showed that demographic variable like Age, Gender, religion, occupation, type of family, family monthly income, source of information about hypertension had shown no statistically significant association with the levels of knowledge regarding Non pharmacological management of hypertension among patients, educational status of patients significant with hypertension patients with.  $P < 0.05$ .

**Conclusion:** In conclusion, in order to treat Essential Hypertension based on non-pharmacological interventions; a multifactorial approach is needed, targeting at a more permanent and finally less physician-dependent measures. Quality nutrition, physical activity of few times per week, attaining normal body weight, cessation of alcohol and tobacco, reduction in sodium intake & increasing calcium, magnesium and potassium, stress management, and supplementation of certain ingredients may prove beneficial.

#### Discussion:

This was supported by the study conducted to assess the knowledge regarding non pharmacological management of hypertension among patients at a selected primary health centers. They concluded that non pharmacological management of programs can effectively reducing blood pressure [8].

This objective was supported by the study conducted on the non-pharmacological management of hypertension was researched and published. It was concluded that self-instruction module was effective in management of hypertension [9].

Similar study conducted to identify barriers to primary care physicians' willingness to increase the intensity of treatment among patients with uncontrolled hypertension. Result showed that Pharmacologic therapy was initiated or changed at only 38% of visits, despite documented hypertension for at least 6 months before the patients' most recent visit. The most frequently cited reason for no initiation or change in therapy was related to the primary care physicians being satisfied with the blood pressure (BP) value (satisfactory BP response, 30%; satisfactory diastolic BP response, 16%; only borderline hypertension, 10%). At 93% of these visits, systolic BP values were 140 mm Hg or higher, which is above the cut point recommended by Sixth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure guidelines, and 35% were 150 mm Hg or higher. On average, physicians reported that 150 mm Hg was the lowest systolic BP at which they would recommend pharmacologic treatment to patients, compared with 91 mm Hg for diastolic BP. Our findings suggest that an important reason why physicians do not treat hypertension more aggressively is that they are willing to accept an elevated systolic BP in their patients. This has an important impact on public health because of the positive association between systolic BP and cardiovascular disease [10].

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