



LIFESTYLE MODIFICATION AWARENESS REGARDING HYPERTENSION AMONG THE GENERAL POPULATION OF THE SELECTED COMMUNITY OF HARIDWAR, UTTARAKHAND

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Abstract: Hypertension is one of the leading causes of debilitating comorbid disorders in young and older generations. It is important to understand the factors which are responsible for hypertension. There are easy ways to control hypertension, but someone must have the adequate knowledge and motivation to change the behavior which may cause or lead to a bad habit. Timely action is helpful in controlling the massive damage to major organs. A healthy diet focuses on the consumption of green leafy vegetables, avoiding fast foods, eating late at night, and keeping yourself out of stress. Managing stresses a healthier way.

Key Words – Hypertension, Life style modification, General population

Introduction

Hypertension is one of the most common health problems in the world and happens to play an important role in controlling hypertension and preventing long-term complications.² High blood pressure (HBP) is known to be a leading risk factor for chronic diseases and mortality.³ “The silent killer” is the second name given as it has no symptoms until significant damage is done to the heart and arteries.⁴ The global burden of hypertension has grown over time due to largely driven by population evolution, sedentary lifestyle and pollution.⁵ Apart from that salt, alcohol, smoking in abnormal amounts and being overweight can be other factors contributing to the diseases.

High blood pressure causes damage to the arteries and heart muscle which can eventually contribute to a heart attack and other major health problems.⁷ Regular health checkups prevent the advancement of disease by identifying the signs & symptoms.⁸ As hypertension is controllable if treated at early stages. Awareness regarding Lifestyle modification could be the first line of non-invasive treatment.⁹ The kind of steep increase that has been seen in India regarding hypertension has made the disease the most modifiable risk factor across the country.¹⁰ Alternative therapies including Herbal remedies, yoga,

meditation and lifestyle recommendation are also helpful in controlling the disease¹².

Hypertension is one of the most common lifestyle diseases today, with every third person we meet, having suffered from it. The fact is that in 90% patients there is no known cause for hypertension and this makes it even more important to be alert. Most are not even aware that they have hypertension, which makes the scenario rather grim.¹³ This syndrome is a cluster of disorders of the body's metabolism, including increased waist circumference, high triglycerides, and low high-density lipoprotein.¹⁴ Worldwide, an estimated 26% of the world's population (972 million people) has hypertension, and the prevalence is expected to increase to 29% by 2025, driven largely by increases in economically developing nations¹⁵.

The number of adults with hypertension in 2025 was predicted to increase by about 60% to a total of 1.56 billion (1.54-1.58 billion).¹⁷ According to Current knowledge they suggest the importance of increased body mass index (BMI) especially muscles fat in the pathophysiology of hypertension.¹⁸ According to WHO, An estimated 1.13 billion people worldwide have hypertension most (two-thirds) living in low and middle-income countries. Hypertension is a major cause of premature death worldwide.²⁰

Method

The present study used the Quantitative Non-experimental research approach as it was considered most suitable for the study. A descriptive research design was used on 60 Study samples living in the selected area of Haridwar. The samples were selected through the purposive sampling technique. The tools used to collect the data were demographic variables and an awareness questionnaire. The tools were developed by the researcher and validation was done. The reliability was done and it was .09. Ethical consideration was done and consent was taken from each participant before data collection.

Results

SECTION – A

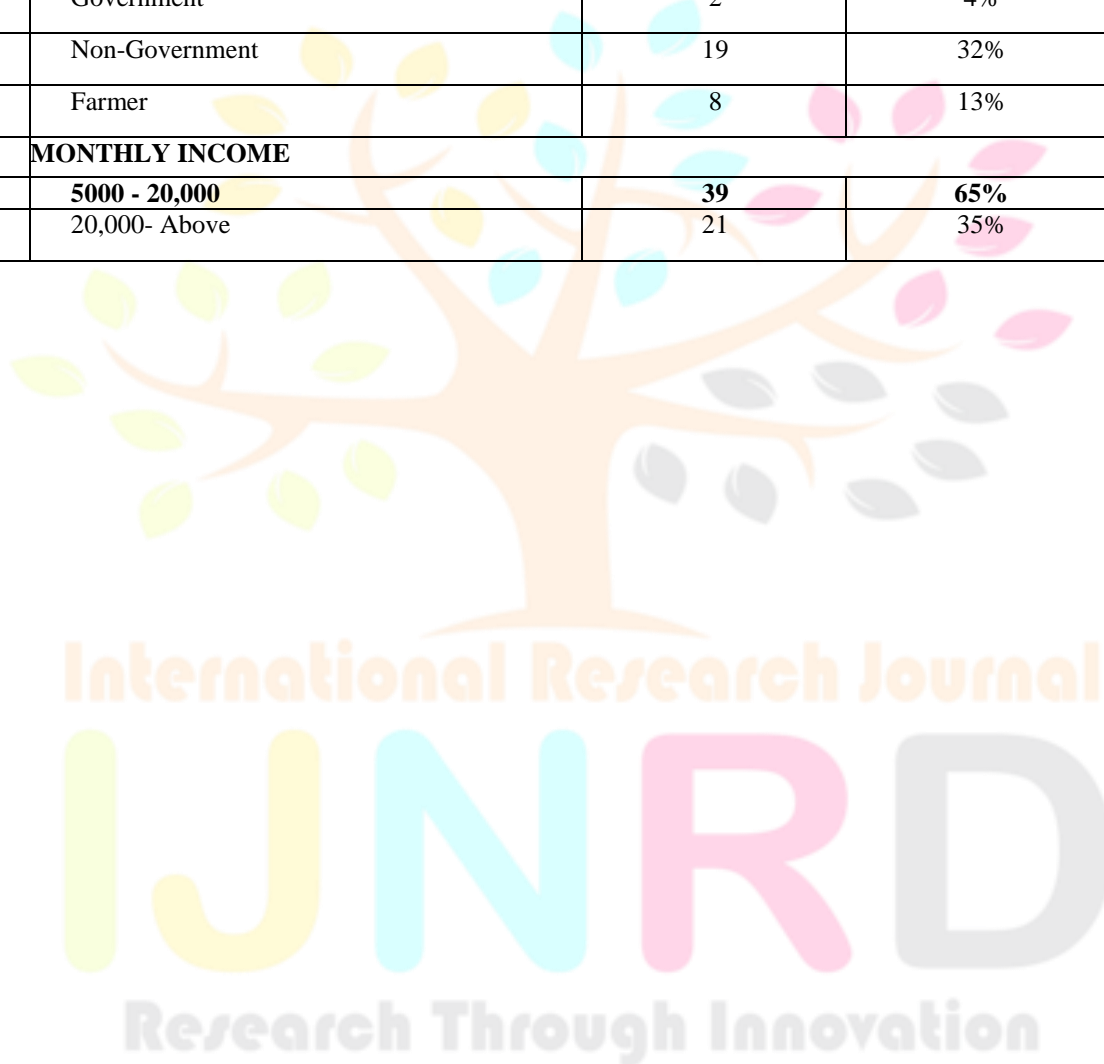
Demographic Variables of the study participants

Table No. 1 Frequency and Percentage distribution of Demographics variables

N= 60

S.N.	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE
1	AGE IN YEARS		
	30-45	38	63%
	46-60	22	37%
2	GENDER		
	Male	23	38%
	Female	37	62%
3	RELIGION		
	Hindu	56	94%
	Sikh	4	6%

4	PREFERENCE OF FOOD		
	Vegetarian	40	67%
	Non Vegetarian	20	33%
5	EDUCATION QUALIFICATION		
	Illiterate	8	13%
	Primary	9	15%
	Secondary	28	47%
	Graduation	9	15%
	post-Graduation	6	10%
6	OCCUPATION		
	Housewife	31	51%
	Government	2	4%
	Non-Government	19	32%
	Farmer	8	13%
7	MONTHLY INCOME		
	5000 - 20,000	39	65%
	20,000- Above	21	35%



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	Marital status		
	Married	59	98%
	Unmarried	1	2%
9	Area of Residence		
	Rural	36	60%
	Urban	24	40%
10	Have you heard of HTN		
	Yes	60	100%
	No	0	0%
11	People feel about their own health		
	Very Good	28	47%
	Good	28	47%
	Not Fine	5	9%
12	HYPERTENSION IN FAMILY		
	Yes	15	25%
	No	45	75%
13	Do you have HTN		
	Yes	14	23%
	No	46	77%
14	Do you consume Alcohol		
	Yes	12	20%
	No	48	80%
15	Do you smoke		
	Yes	12	20%
	No	48	80%

socio-demographic data of the study subjects included age, gender, religion, preference of food, education qualification, occupation, monthly income, marital status, area of residence etc. The data shown in table no. 1 depict of percentage and frequency of characteristics which shown the majority 38 (63%) of study participants in age group of 30 – 45 years and 22 (37%) study participants were in the age group of 46 – 60 years. Majority 37 (62%) participants were female, 23 (38%) participants were male.

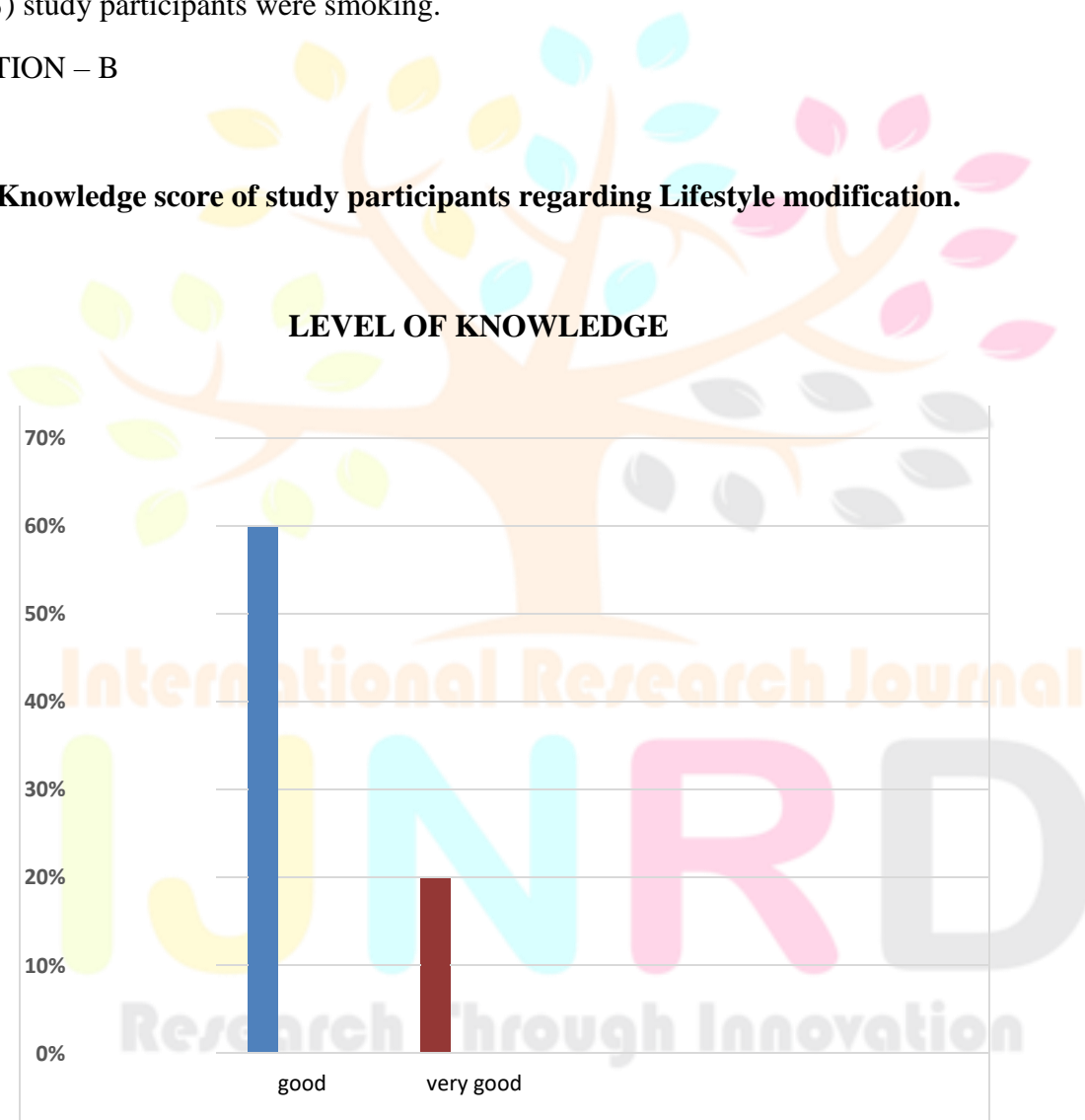
The majority 56(94%) of the study participants were Hindu and 4(6%) study participants were Sikh. Majority 28(47%) of the study participants were secondary education qualification and 9(15%) study participants were both primary and graduation education qualification and 8(13%) study participants were illiterate. Majority 31(51%) of study participants were housewife and 19(32%) study participants were non-government and 8(13%) study participants were farmer and 2(4%) study participants were government. Majority 39(65%) study participants monthly income 5,000 – 20,000 and 21(35%) study participants monthly

income above 20,000. Majority 59(98%) study participants were married and 1(2%) study participant unmarried.

Majority 36(60%) of study participants were rural and 24(40%) study participants were urban. Majority 60(100%) study participants were heard about HTN. Majority 28(47%) study participants were both very good & good feel about own health and 5(9%) study participants were feel not fine. Majority 45(75%) study participants were family members not suffer from HTN and 15(25%) study participants family member suffer from HTN. Majority 46(77%) study participants were not suffered from HTN and 14(23%) study participants suffer from HTN. Majority 48(80%) study participants were not consuming alcohol and 12(20%) study participants were consuming alcohol. Majority 48(80%) study participants were not smoking and 12(20%) study participants were smoking.

SECTION – B

Knowledge score of study participants regarding Lifestyle modification.



Graph No. 4.2 Distribution of samples according to their knowledge score

Graph 1 inferred that 62% of study participants had good knowledge, 38% of study participants had very good knowledge of hypertension.

SECTION – D

Tables No. 2 Association of the level of knowledge of study participants with their selected Demographics Variables N=60

S.N.	Demographical data	Below	Above	Calculated value
1.	Age in year			
	30 – 45	13	25	2.5724#
	46 – 60	13	9	
2.	Gender			
	Male	11	12	0.0064#
	Female	16	21	
3.	Religion			
	Hindu	25	31	0.043#
	Sikh	2	2	
4.	Preferences of food			
	Vegetarian	18	22	0.0758#
	Non-Vegetarian	9	11	
5.	Education Qualification			
	Illiterate	6	2	0.7616#
	Primary	6	3	
	Secondary	13	15	
	Graduate	1	8	
	Postgraduate	1	5	
6.	Occupation			
	House wife	12	19	4.6213#
	Government	1	1	
	Non-government	6	13	
	Farmer	6	2	
7.	Monthly income			
		23	16	11.1014#
	5000 - 20,000			

	20,000 – above	3	18	
8.	Marital Status			
	Married	26	33	52156#
	Unmarried	0	1	
9.	Area of Residence			
	Rural	19	17	2.3784#
	Urban	7	17	
10.	Have you heard of HTN			
	Yes	36	24	0#
	No	0	0	
11.	People feel about own health			
	Very good	15	13	1.2995#
	Good	15	13	
	Not fine	4	1	
12.	Do you have HTN			
	Yes	8	6	0.0712#
	No	26	20	
	If Yes, So how long			
	Are you treating it			
13.	Does anyone in your family suffer from HTN			
	Yes	8	7	0#
	No	26	19	
14.	Do you drink Alcohol			
	Yes	8	4	0.6109#
	No	26	22	
	If Yes, So how often and how long do you consume			
15.	Do you smoke			
	Yes	7	3	0.0382#
	No	27	21	
	If Yes, So how many cigarettes do you consume in 1 day			

- Yates test, @ - Fisher exact test, chi-square test, df, P<0.05

Table 4.3 was showed that no association between the level of knowledge and their selected socio-demographic variables based on the objectives. Fisher exact and chi square and Yates correction exact were applied to see the association between levels of knowledge among general population with their selected socio-demographic variables. There was no significant association between levels of knowledge among general population with their selected socio-demographic variables (age, gender, religion, preference of food, education qualification etc.)

Discussion

In the present study more than half of the participants (62%) having information about the lifestyle modification of hypertension and the majority 38 (63%) of study participant in the age group of 30 to 45 years and 22 (37%) study participants were in the age group 46 to 60 years, majority 37 (62%) participants were female, 23 (38%) participants were males, mean and overall mean score \pm SD for study participants was 20.5 ± 2.711 , a study conducted by **S. Pirasath, T. Kumanan, M. Guruparan (2017)** the result of the study was 73 of 303 patients were males. 70% of patients had adequate knowledge about hypertension. 41% of patients were unaware of their disease status. The study conducted by **Lama A. Baksh, Alshimaa A. Adas, et. al. (2017)** the result of the study shows that at the awareness level of the hypertension high in majority of cases (72%) and knowledge level was average in 54% patients. The study conducted by **Nurul Fatin Binti Buang, Nor Azlina A Rahman et. al. (2019)** also supported the result mean age of 41 years, SD = 11.828 the total mean and SD of, knowledge (SD = 6.25).

Suggestion

- The study enhances the level of knowledge of general population regarding Lifestyle modification of HTN.

Recommendation

- A study can undertake on a large scale for making more valid generalization.
- The study was conducted in general population, community, hospital.
- The study can be done including other component of quality of life.
- A similar study can be done to provide education program to enhance the knowledge of general population.
- A similar study can be done on knowledge of the general population regarding Lifestyle modification of HTN.

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