



## A SURVEY OF KNOWLEDGE AND AWARENESS ABOUT HYPERTENSION IN HYPERTENSIVE PATIENTS.

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### ABSTRACT

**AIMS:** The aim of present study was to investigate the knowledge and awareness about hypertension in hypertensive patients.

**MATERIALS AND METHODS:** This cross sectional, survey among patients of hypertension attending medicine outpatients department. Consenting patients provided their sociodemographic information and asked to respond multiple choice questionnaire.

**RESULTS:** Sample size was 120, aged 18-50 years (mean age of  $40.17 \pm 3.73$ ) with mean years of education were  $10.27 \pm 2.27$  years. about 80 -90 % respondent were knowing correctly about basic terminology like meaning of "systolic" and "diastolic". Most of the patients were aware about risk of complications, diet control, needs and duration of medication (78- 91% correct answers). Internet search is an emerging source of information.

**CONCLUSIONS:** The basic knowledge and awareness about hypertension in young hypertensive is found to be satisfactory in ours survey.

**KEYWORDS :** Knowledge; Hypertension Awareness; Hypertension.

### INTRODUCTION

Systemic hypertension is a disease of public health importance, which is a significant risk factor for cardiovascular death and disability [1,2]. While hypertension prevalence is highest in older populations, almost 20 percent of young adults are hypertensive [3]. Earlier studies reported that, older respondents tend to be more aware of their hypertensive status, while young adults tend to have particularly low hypertension awareness [4]. Some studies has been reported that only about two-thirds of adults and the elderly aware of their hypertension status [5]. In contrast younger individuals tend to be healthier, they are less likely to see doctors on a regular basis, decreasing the likelihood that they will have accurate and up-to-date knowledge of their blood pressure status. This suggests that duration of hypertension may have impact on knowledge and hypertension awareness. Even few studies found differences between men and women in this context [6]. Few studies have examined the gender differences in hypertension awareness and found that women have higher levels of hypertension awareness than men [7,8] but other work has suggested that hypertension awareness is higher among men than women [9]. Studies that have compared self-reported hypertension to objective measures of systolic and diastolic blood pressure have found relatively low levels of hypertension awareness among the population [10].

Determining knowledge about hypertension and hypertension awareness are most important factors that is critical for improving hypertension control and reducing further risk of complications.

The aim of this study was to examine whether there are basic knowledge and awareness about hypertension in young hypertensives by using objectively measured self-reports questionnaire. Also in process opportunity will be used to provide adequate and essential information to participants.

### MATERIALS AND METHOD

The aim of the present study was to assess for Knowledge and Awareness about Hypertension in Hypertensive patients. This

study was conducted at medical out patients department of a tertiary care medical college hospital, of Jharkhand, India. It was a cross-sectional study carried out over a six month period (March 2018- August 2018). All adult patients aged 18-50 years, suffering from hypertension, who satisfied the inclusion criteria for the study and consented were recruited. All recruited patients were requested to complete a questionnaire about their socio-demographic data sheet and thereafter questionnaire about knowledge and awareness about hypertension was applied.

### SUBJECTS

Subject patients were included from both sexes within age group 18 to 50 years, who were visiting at medicine outpatient department for management of hypertension. The exclusion criteria included patients with unstable or life-threatening medical conditions, diabetes, fever, infective illness etc. Other exclusion conditions were comorbid diagnosis of substance dependence or psychiatric disorders. These patients were examined clinically after taking detailed history about the illness and their sociodemographic variables.

### TOOLS

**Socio-demographic Data Sheet:** The socio demographic data sheet included age and gender of the patients, educational qualification, religion and socio economic class of the patients.

**Hypertension knowledge and awareness questionnaire:** It consists 8 questions with multiple options to choose. Patients were asked to read each question and place a tick against the reply that came closest to how they know.

### Procedure:

It was a cross sectional observational study. All subjects were assessed for inclusion – exclusion criteria, and on qualification they were requested to fill up Socio-demographic data sheet or asked verbally and filled up by investigators. The Hypertension knowledge and awareness questionnaire was applied on all subjects and recorded. It was done before a brief educative information about

hypertension was provided to them.

**Statistical Analysis:** The collected data of all students was statistically analyzed, using Statistical Package for Social Sciences (SPSS, Inc., Chicago, Illinois) version 10.0.

Data analysis of sociodemographic profile included means and standard deviations for continuous variables and expression as percentage for categorical variables.

## RESULTS

A total of 120 patients (31.67% female and 68.33% male) with age below 50 years (mean age of  $40.17 \pm 3.73$ ) were included for the study, the mean years of education were  $10.27 \pm 2.27$  years (table -1). Table 1 summarizes the sample characteristics and survey findings.

On eight common awareness questions the response were multiple choice types to assess the knowledge regarding hypertension. The first question was on meaning of hypertension, and 84 persons correctly answered the question and 21 persons considered it as an expression of anger or hyperactivity. Around 90% of patients were aware of systemic consequences of hypertension. The correct response about meaning of "systolic" and "diastolic" was given by 91% and 82% respectively, however many were not sure about their importance. About 78% considered salt as most important diet restriction. Most importantly about 106 (88%) respondent agreed for life long duration of treatment. Regarding source of information in addition to treating physician about hypertension was obtained mostly (80%) from family or friends, however internet search is also important source of information (26.66%) (Table -1).

## DISCUSSION

In this study, our results provide insights into the knowledge and hypertension awareness in relation to various common aspects of hypertension. In addition to assessing hypertension related knowledge, needed knowledge was provided and their incorrect knowledge was corrected. We planned this study on young adults (below 50 years) as we expected shorter duration of illness. Role of duration of illness may be in part due to differences in age, repeated physician consultation, or even self searching on internet and many other co incidental factors that cannot be controlled like behavioral risk factors, BMI, smoking, and physical activity. However, taking these factors into account had virtually no effect on the duration disparity may be found in hypertension. This suggests that more research is needed to investigate other behavioral factors that may explain this awareness knowledge and duration of illness.

An attributing factor may be research methodology itself, that relies on self-reports of hypertension related most likely underestimates or over reporting the disparity, however knowledge and awareness are critical for treating and controlling hypertension. In accordance to earlier studies our results also reveal that the level of hypertension awareness in the general population is good and improving [8], it may be attributable to increased use and assess to internet, which is a common mean for searching information and verifying facts told by treating physicians or health care providers.

There are studies which addressed gender role, several studies in western world have demonstrated that men use health care services at a much lower rate than women [11], but for India the situations may be reversed.

Future research should continue to investigate if there are behavioral factors that contribute to attitude and awareness in hypertension in order to understand elevated risk of hypertension beyond biological factors. Given that

hypertension and cardiovascular disease risk increases over time, interventions that target and treat the young adult population are critical for improving population health. The results presented in this study also emphasize the role of health care use for improving hypertension awareness and thereby potentially improving hypertension control. Given the low levels of educational status of persons from rural background, hypertension awareness among young adults, public health policymakers should focus on interventions to improve hypertension awareness among young adults.

## CONCLUSION :

The basic knowledge and awareness about hypertension in young hypertensives is essential for adequate control of illness, it was found satisfactory in our survey.

**Table - 1 : Socio demographic variables and findings of the study**

Gender	Male	82 (68.33%)
	Female	38 (31.67%)
Age	$46.17 \pm 3.73$	
Years of education	$10.27 \pm 2.27$	
1. hypertension mean?	High blood pressure	84 (70%)
	Nervous condition	5 (4.16%)
	Anger /Overactivity	21 (17.5%)
	Don't know	10 (8.33%)
2. Consequence of hypertension ?	Brain, Heart, Kidney disease	108 (90%)
	Don't know	12 (10%)
3. Correctly knows about "systolic"	top number	91 (75.83%)
4. Correctly replied about "diastolic"	lower number	82 (69.86%)
5. Which measure(s) is (are) more important?	Top (systolic)	23 (19.16%)
	Bottom (diastolic)	54 (45%)
	Both (top and bottom)	35 (29.16%)
	Don't know	8 (6.66%)
6. Most important Diet restriction	salt	94 (78.33%)
7. Duration of treatment for hypertension	Life long	106 (88.33%)
8. Source of information in addition to doctors	Family / Friends	80 (66.66%)
	Internet	32 (26.66%)
	book / newspaper	8 (6.66%)

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