



HYPERTENSION; THE ICE BERG

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ABSTRACT... Objectives: To assess awareness about Hypertension among patients. **Study design:** Cross-sectional Survey. **Setting:** Medical OPD at Rawal General Hospital, Islamabad. **Period:** Three months from 1st April to 30th June. **Materials and Methods:** A total of 150 male, female patients attending Medical Out Patient Department at Rawal General Hospital Islamabad were assessed regarding awareness about Hypertension using a self-constructed mixed questionnaire (In English and Urdu). **Results:** Following findings were observed among patients attending RGH, Islamabad: 82% of patients found to have family history of HTN, while 13% responded negative. 5% of the patients were unaware. 33% of patients found to have diabetes mellitus, while 29% responded negative and 38% of the patients were unaware of having or not. Hypertensive population found to be 51%. 45% found to adhering to anti-hypertensive treatment, while 55% responded negative. 80.6%, 90%, 73%, 82% and 85% considered the obesity, lack of exercise, cigarette smoking, anxiety and high cholesterol respectively as causative factor of HTN. Excessive intake of salt was considered by 84% as causative factor of HTN. About 82% considered DM as causative factor of HTN. 79%, 73%, 93%, 55% of the patients considered the cardiac disease, renal failure, brain hemorrhage and loss vision respectively as complication of HTN. 80%, 90%, 73%, 27% consider the regular exercise, reduced salt intake, no smoking, keeping weight under control respectively as preventive measures of HTN. About half and more than half of the respondents considered frequent use of vegetables, excessive intake of sweets, as preventive measures of hypertension. **Conclusions:** The assessment of awareness about Hypertension among population of various areas can be beneficial in effective planning for disease prevention and control.

Key words: Awareness, Out Patient Department and Hypertension.

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INTRODUCTION

The word “Hypertension” is also known as high or raised blood pressure and it is referred to a condition in which the blood vessels have persistently raised pressure. In general adult blood pressure can be defined as a blood pressure of 120 mm Hg¹ when the heart beats (systolic) and a blood pressure of 80 mm Hg when the heart relaxes (diastolic). When systolic blood pressure is equal to or above 140 mm Hg and/or a diastolic blood pressure equal to or above 90 mm Hg the blood pressure is considered to be raised or high.¹

In 90% of cases the cause of hypertension remains ambiguous.

“Hypertension is generally a product of genetic

predisposition with environmental and lifestyle factors”.²Scale of blood pressure is millimeters of mercury (mmHg), that corresponds to the height of a Hg column that can be maintained in a mercury containing sphygmomanometer, a method which until recently was the standard approach of measuring blood pressure.

“Hypertensive heart disease is the result of structural and functional adaptations”.³ Which leads to left ventricular hypertrophy,³⁻⁵ CHF, cardiac arrhythmias, diastolic dysfunction and abnormalities of blood flow due to atherosclerotic coronary artery disease and microvascular disease.³ “Pulmonary arterial hypertension (PAH)” is a newly renowned disease in those patients with renal ailment.^{6,7}

SUBJECTS AND METHODS

Setting

Study was carried out at medical OPD at Rawal general Hospital, Islamabad.

Study design

Cross-sectional Survey.

Study period

Three months from 1st April to 30th June.

Sample size

300 subjects. (150 subjects from each, Rawal General Hospital, Islamabad and THQ Hospital, Hassan Abdal.)

Sampling Technique

Convenience Sampling.

Data Collection

A self-constructed mixed questionnaire (In English and Urdu). Questionnaire is attached as Annexure "A".

Data analysis

Through SPSS version 19.

Informed written consent

Consent was obtained in written form before the start of interview, from each subject.

RESULTS

Data of patients attending OPD at Rawal general Hospital, Islamabad, responding towards family history of hypertension are shown in table-I.

Type of responses	Yes	No	Don't know
	123	20	7
Percentage	82	13	5

Table-I. Family History of Hypertension – Rawal General Hospital Islamabad

Data of patients attending OPD at Rawal General Hospital, Islamabad, responding about having Diabetes Mellitus are shown in table-II.

Type of responses	Yes	No	Don't know
	57	80	13
Percentage	38	53.3	8.7

Table-II. Awareness about having Diabetes Mellitus – Rawal General Hospital Islamabad

About half of the patients attending OPD at Rawal General Hospital affirmed that they are having hypertension. Response of the patients is given in table-III.

Type of responses	Yes	No	Don't know
	77	50	23
Percentage	51.3	33.3	15.3

Table-III. Awareness about having Hypertension – Rawal General Hospital Islamabad

When those hypertensive patients were asked about their medication, at Rawal General Hospital Islamabad, less than half of the population responded positive, as given in table-IV.

Type of responses	Yes	No
	35	42
Percentage	45.4	54.6

Table-IV. Adherence to Anti-Hypertensive Treatment – Rawal General Hospital Islamabad

Data of patients attending OPD at Rawal General Hospital Islamabad, responding towards Possible Causes of hypertension are shown in Figure-1.

How well people were aware about complications associated with HTN at Rawal General Hospital Islamabad, is shown in Figure-II.

Graphical representation for assessment of awareness among patients attending OPD at Rawal General Hospital about preventive measures of HTN are shown in figure-3.

DISCUSSIONS

In Pakistan 10 – 20% of the population suffering from Hypertension. The alarming fact is that in 90% of the hypertensive cases the patient does not have any symptoms so in spite of having high blood pressure the patient does not care about it because he or she believes that not to worry for a disease which don't cause any symptoms.

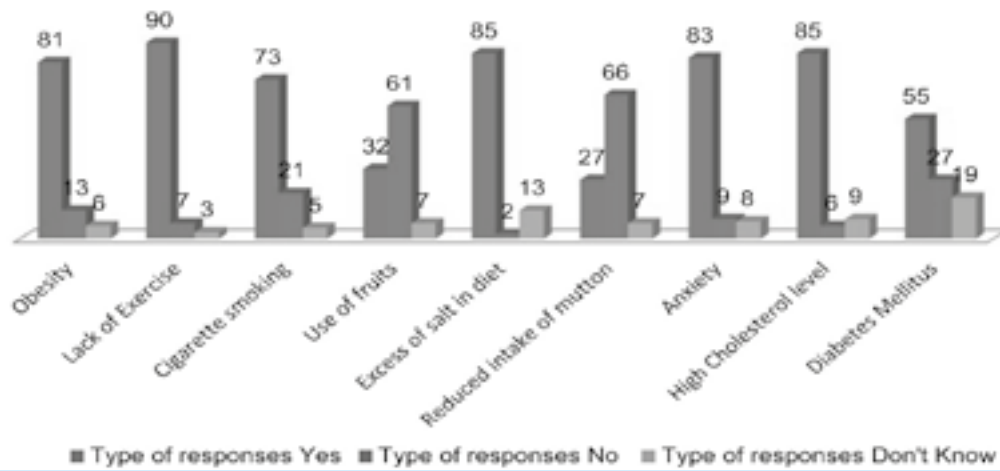


Figure-1. Awareness about causes of HTN among patients attending Rawal general hospital Islamabad

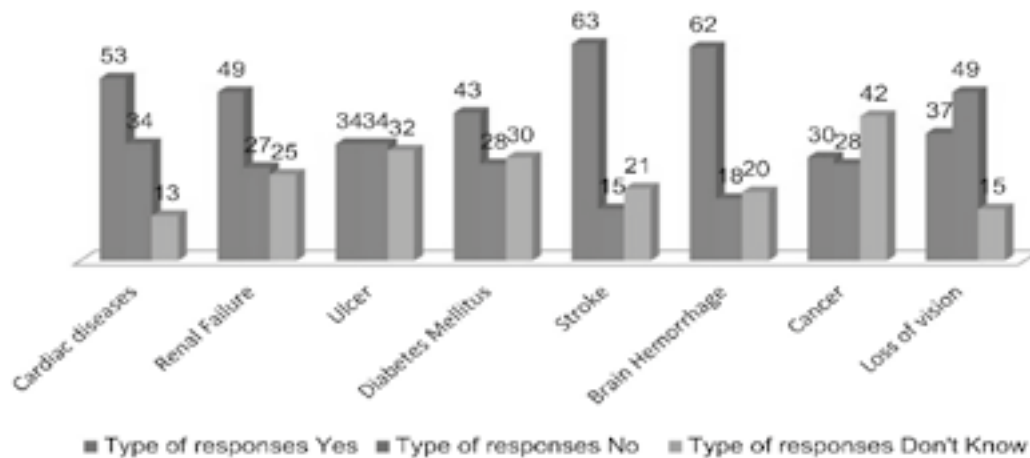


Figure-2. Awareness about complications of HTN among patients attending Rawal general hospital

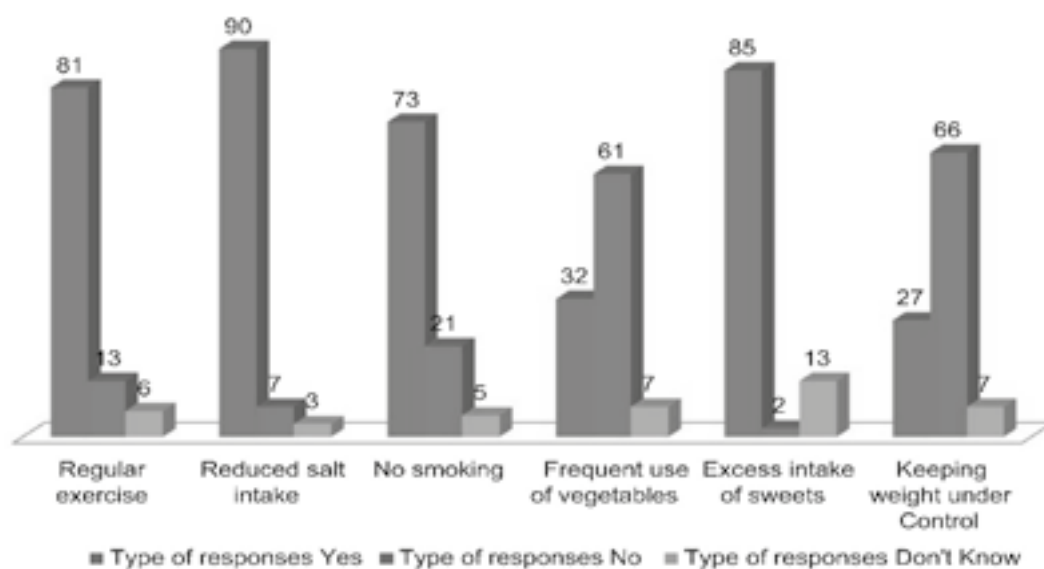


Figure-3. Awareness about prevention of HTN among patients attending Rawal general hospital Islamabad

The complication arising out of persistently high blood are disastrous. On the other hand prevention and control is quite easy and cost effective. Adopting a healthy life such as daily walk, reduced salt intake, avoiding sweet drinks, keeping away from smoking and the early detection are the basic steps to combat this hidden disease. Next important step is to provide door step health facilities for detection of high blood pressure and easy cost effective provision of medicines.^{8,9}

Data collected at Rawal General Hospital Islamabad showed that among the patients attending OPD 82% of patients found to have family history of HTN, while 13% responded negative. 5% of the patients were unaware of their family history of HTN. 33% of patients found to have diabetes mellitus, while 29% responded negative. 38% of the patients were unaware of having or not. The problem of hypertension was found in 51% of the population. 45% of patients found to adhering to anti-hypertensive treatment, while 55% responded negative.

The affordability of the anti-hypertensive medications being prescribed directly affects the compliance of the patients especially in a developing country like Pakistan.¹⁰

According to the data 80.6%, 90%, 73%, 82% and 85% considered the obesity, lack of exercise, cigarette smoking, anxiety and high cholesterol respectively as causative factor of hypertension. Excessive intake of salt was considered by 84% as causative factor of hypertension. About 82% considered diabetes Mellitus as causative factor of hypertension. 79%, 73%, 93%, 55% of the patients considered the cardiac disease, renal failure, brain hemorrhage and loss vision respectively as complication of hypertension. A significant percentage of respondent were well aware of stroke as a complication. 80%, 90%, 73%, 27% consider the regular exercise, reduced salt intake, no smoking, keeping weight under control respectively as preventive measures of hypertension. About half and more than half of the respondents considered frequent use of vegetables, excessive intake of sweets, as preventive measures

of hypertension.

Awareness scores were significantly higher in patients attending the Rawal general hospital, Islamabad as compared to the rural area hospitals like THQ Hospital Hassan Abdal. In my opinion the likely reason was difference in the level of education among people belonging to urban area and rural areas. Higher awareness was noted among those with a family history of hypertension because relatives of hypertensive patients closely experience the disease affecting their family members and learn about it more. Adherence to the medications was directly related to the level of awareness. Higher the awareness score better the compliance to the medication. Same trend reported in the studies conducted in other national and international studies.¹¹⁻¹³ This study had some limitations as it was conducted on selected group of persons, so there is selection bias.

CONCLUSION

It is the time to act as developing countries like Pakistan already suffering the huge burden of communicable diseases and now there is ever growing burden of the non-communicable diseases like hypertension. This combine burden of communicable and non-communicable disease is leading to disaster unless health emergency is declared on both at the government and public levels.

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“Don't judge a situation you've never been in.”

Mitchell Perry



AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
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2	Dr. Shaukat Ali	Significant	
3	Dr. Zafar Latif	Significant	