



KNOWLEDGE, ATTITUDE AND PRACTICES OF HYPERTENSIVE PATIENTS ATTENDING OPD AT RURAL HEALTH TRAINING CENTRE ATTACHED TO A TERTIARY HEALTH CARE INSTITUTE.

Community Medicine

**Dr. Mane Yogesh
Yogiraj**

Assistant Professor, S.R.T.R GMC, Ambajogai.

**Dr. Bhondwe
Meghraj
Ramchandra***

MBBS, MD. Community Medicine, UHTC Medical Officer, S.R.T.R GMC, Ambajogai.

*Corresponding Author

**Dr. Sable Sumit
Bhimrao**

Junior Resident, S.R.T.R GMC, Ambajogai.

ABSTRACT

Hypertension remains a major risk factor for cardiovascular diseases around the world¹. Hypertension can be described as the 'sleeping snake' which bites when it wakes up². Cardiovascular diseases remain the top cause of global mortality, with an estimated 17.9 million attributed deaths in 2016 (31% of global deaths)³. Hypertension is an important worldwide public health challenge. It has changed from a trivial cause of death and disability to one of the global burden diseases. The biggest obstacle for inadequate therapeutic control of blood pressure is meagre knowledge, poor attitude, inadequate treatment practices and lack of adherence towards antihypertensive treatment⁴.

AIM & OBJECTIVES-To determine the current knowledge, attitude and practices of hypertensive patients towards hypertension attending OPD at Rural Health Training Centre attached to a Tertiary health care Institute.

METHODOLOGY- A cross-sectional study carried out in Rural Health Training Centre attached to the Tertiary Care Institute from 1st November 2017 to 31st January 2018 in 100 hypertensive patients attended the OPD.

RESULTS AND CONCLUSION - In this study hypertensive patient taking treatment in OPD at Rural Health Training Centre have relatively less knowledge, positive attitude and good practices towards the hypertension management.

KEYWORDS

Knowledge, Attitude, Practices, Hypertensive, Rural health Training Centre.

INTRODUCTION

Hypertension can be defined as a condition where blood pressure (BP) is elevated to an extent where clinical benefit is obtained from blood pressure lowering. Hypertension has emerged as a disease of significant importance in many developing nations, including India, which are in a transitional phase from communicable diseases to non-communicable diseases².

Hypertension is consistently related to the development of ischemic heart disease, heart failure, stroke, and chronic kidney disease; an estimated 57% and 24% of stroke and coronary artery disease-related deaths, respectively are due to hypertension³. Hypertension has become a public health challenge. Hypertension itself is not a disease but is known as a disease of complication, more so because of an increased risk of concomitant cardiovascular and renal complications⁴.

During the past century hypertension has changed from a minor cause of death and disability to one of the global burden diseases. It has now been recognised as a foremost risk factor for cardiovascular morbidity and mortality⁴. It is a silent killer as very rarely any symptom can be seen in its early stages until a severe medical crisis takes place like heart attack, stroke, or chronic kidney disease. Since people are unaware of excessive blood pressure, it is only through measurements that detection can be done. Although majority of patients with hypertension remain asymptomatic, some people with HTN report headaches, light headedness, vertigo, altered vision, or fainting episode⁵. There is no doubt that knowledge and attitudes of patients have an impact on the management of their illness, as they can influence compliance, hypertension control, morbidity and mortality of the patients. Obtaining information about the level of awareness from the general public and patients is the first step in formulating a preventive program for the disease. KAP surveys are effective in providing a baseline for evaluating intervention programs⁶.

Systemic arterial hypertension is the most important modifiable risk factor for all-cause morbidity and mortality worldwide and is associated with increased risk of cardiovascular disease (CVD). Fewer than half of those with hypertension are aware of their condition, and many others are aware but not treated or inadequately treated, although successful treatment of hypertension reduces the global burden of disease and mortality. The aetiology of hypertension involves the complex interplay of environmental and pathophysiological factors that affect multiple systems, as well as genetic predisposition.

Evaluation of patients with hypertension includes accurate standardized blood pressure (BP) measurement, assessing patients' predicted risk of atherosclerotic CVD, evidence of target organ damage, detection of secondary causes of hypertension and presence of comorbidities, including CVD and kidney disease. Lifestyle changes, including dietary modifications and increased physical activity, are effective in lowering BP and preventing hypertension and its CVD sequelae. Pharmacological therapy is very effective in lowering BP and preventing CVD outcomes in most patients; first line antihypertensive medications include angiotensin-converting enzyme (ACE) inhibitors, angiotensin II receptor blockers, dihydropyridine calcium channel blockers and thiazide diuretics⁷.

Globally, 3.5 billion adults now have non-optimal systolic BP levels (that is, >110–115 mmHg) and 874 million adults have systolic BP $\geq$ 140 mmHg. Thus, approximately one in four adults has hypertension. Between 1990 and 2015 there was a 43% increase in the total global number of healthy life years lost to non-optimal BP, driven by population increase, population aging and a 10% increase in the age-standardized prevalence of hypertension. The Global Burden of Disease study has shown that non-optimal BP continues to be the biggest single risk factor contributing to the global burden of disease and to global all-cause mortality, leading to 9.4 million deaths and 212 million lost healthy life years (8.5% of the global total) each year⁷. In India, among adults one in three was found to have a raised blood pressure and about half of them remained undetected during WHO surveys. The number of hypertensive in India was expected to nearly double from 118 million in 2000 to 213 million by 2025⁸. In India, about 25% of adults in cities and 10% adults in rural areas suffer from hypertension. The overall incidence of hypertension in India is estimated to be 66 million⁹.

Those who are identified as hypertensive often receive inappropriate care or fail to adhere to therapy, and remain uncontrolled. The prevalence of controlled hypertension is only in around 10% and 20% of rural and urban patients with hypertension respectively. Apart from undiagnosed, uncontrolled hypertension, there is also the challenge of misdiagnosis of hypertension in India. This is because of poorly standardized techniques of BP measurement, poorly calibrated measurement devices, reliance on single readings taken on a single visit for diagnosis rather than multiple readings confirmed by elevated readings on follow up. Improved detection of hypertension is a public health imperative in India, and management of hypertension is one of the most important and cost-effective interventions in primary care¹⁰.

NEED FOR THE STUDY

Hypertension is an important modifiable risk factor for cardiovascular and renal diseases. People with high blood pressure often do not feel sick; hypertension is an important public health issue and contributes to the incidence of stroke and coronary heart disease. Awareness of hypertension in India is low while appropriate treatment and control are even lower. It is out most important to assess knowledge, attitude and practices of hypertensive patients for the better outcomes and decreasing complications associated with this condition hence this study was conducted.

MATERIALS & METHODOLOGY

1.Study design: A cross-sectional study.

2.Study setting: The study was carried out among patients attending to OPD at Rural Health Training Centre attached to the Tertiary care Institute.

3.Study duration: The present study was carried out from 1st November 2017 to 31st January 2018.

4.Study population: 100 hypertensive patients attending to OPD at Rural Health Training Centre attached to the Tertiary care Institute were selected by Convenience sampling and enrolled in the study as per following inclusion and exclusion criteria.

INCLUSION CRITERIA:

- Patients who were diagnosed with hypertension.
- Patients who were given consent for the study.

EXCLUSION CRITERIA:

Patients with comorbidity other than hypertension.

5.Sampling Technique and Sample Size:

Study was done in hypertensive patients attending to OPD at Rural Health Training Centre attached to the Tertiary care Institute. Patients were enrolled in this study by Convenience sampling and according to inclusion and exclusion criteria. With this 100 hypertensive patients were enrolled in this study.

6.DATA COLLECTION:

- The objective and purpose of the study was explained to the study participants. Before starting the data collection process, a good rapport was built with the hypertensive patients by giving a short introduction; pre-designed and pre-tested questionnaire was explained.
- The patient was interviewed by the investigator and data was collected using pre-designed and pre-tested questionnaire.

7. Data compilation:

Collected data was entered into Microsoft-Excel 2010 worksheets and coded appropriately.

DATAANALYSIS:

Data was analysed using Microsoft Excel 2010, Open EPI-Info Version 3.01 updated on 2013/04/06. Frequency and percentage were used to describe the data appropriately.

Advice and Referral services: All hypertensive patients were advised about the appropriate treatment, life style modifications, importance of daily physical activity and healthy diet. All those hypertensive patients requiring referral for further investigations and management during the study period were referred to the tertiary care hospital.

Reference Citation¹²:

Vancouver system of listing and citing of reference was used. The references were numbered according to their appearance in the text and listed accordingly.

OBSERVATIONS AND RESULTS

This cross-Sectional study was conducted by using pre-designed, pretested and close ended questionnaires in total 100 Hypertensive patients to determine their knowledge, attitude and practices towards hypertension and showed following results.

Socio-demographic Characteristics:

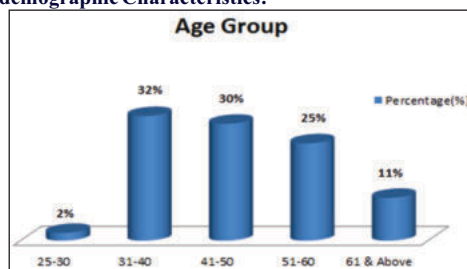


Figure-1: Age wise distribution of Hypertensive patient.

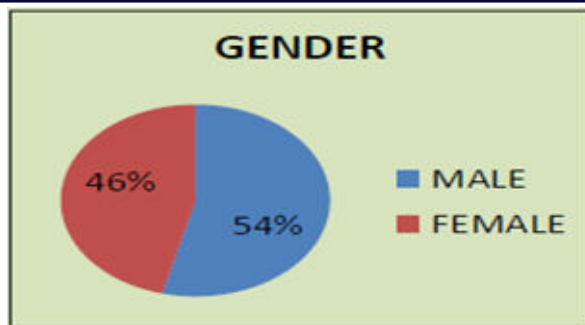


Figure-2: Gender wise distribution of Hypertensive patient.

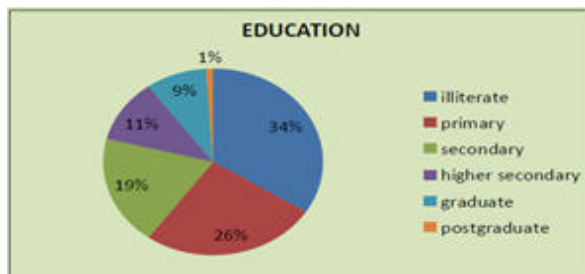


Figure-3: Education of Hypertensive patient.

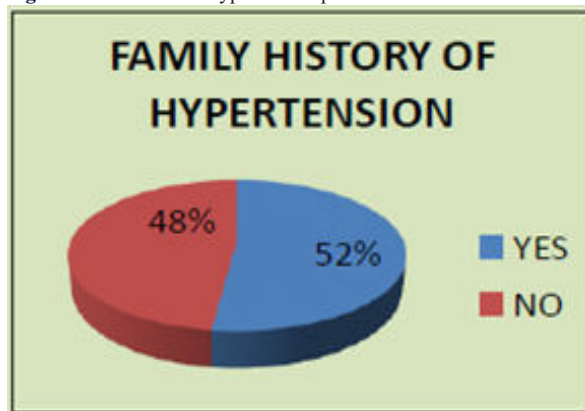


Figure-4: Distribution of Hypertensive patients according to Family History.

B. Knowledge, Attitude and Practices among Hypertensive Patients :

Table 1: Knowledge Of Hypertensive Patients		
Questions	Number of patients correctly answered n=100[%]	Number of patients wrongly answered n=100[%]
1.Do you know the normal BP reading?	48	52
2.Do you know what the high BP is?	25	75
3.Do you know what complications can arise if BP is not controlled?	41	59
4.Is high BP hereditary?	14	86
5.Is excessive salt intake one of the risk factors for developing high BP?	77	23
6.Is excessive alcohol intake one of the risk factors for developing high BP?	89	11.
7.Is being overweight one of the risk factors for developing high BP?	82	18
8.Do you know about the symptoms of high BP?	72	28
9.Do you know about the symptoms of low BP?	40	60
10.Do you know how high BP is managed?	31	69
11.Do you have to take antihypertensive medicines for life long?	83	17
12.Do antihypertensive medicines lower your BP below normal?	32	68
13.Is regular BP measurement necessary for high BP patients?	78	22

Table 2: Attitude Of Hypertensive Patients

Questions	Number of patients correctly answered n=100[%]	Number of patients wrongly answered n=100[%]
1.Do you think regular checking of blood pressure is important?	74	26
2.Should we reduce salt intake to prevent hypertension?	74	26
3.Should one visit doctor regularly once antihypertensive treatment has been started?	61	39
4.Do u think regular medication is essential in hypertension?	92	8
5.Should we exercise regularly for healthy life?	73	27

Table 3: Practices Among Hypertensive Patients

Questions	Number of patients with Type of adherence.		
	frequent	occasional	no
1.How often do you measure your BP?	68	32	0
2.How often do you moderate your salt intake?	49	12	31
3.How often do you avoid fatty food consumption?	13	29	58
4.How often do you consume alcohol?	18	12	70
5.How often do you perform physical exercise?	11	1	88
6.How often do you check your body weight?	11	43	46
7.How often do you smoke?	31	0	69
8.How often do you chew tobacco regularly?	40	1	59
9.How often do you miss the dose of your medication?	29	70	1
10.How often do you consult your healthcare provider?	69	31	0

DISCUSSION

In the present study most of the hypertensive patients were from age group of 31-40 i.e. 32% (Figure-1), most of them were males i.e. 54% (Figure-2), most of them were illiterate i.e. 34% (Figure-3) and 52% were having family history of hypertension (Figure-4).

U. Ralapanawa et al in their study found that out of the total hypertensive patients 68.2% were females, mean age of males was 65 years whereas 64 years for females, 3.2% had never gone to the school¹. A.K. Das et al mentioned in their study that out of the total participants 53.15% were males and 46.85% were females, age ranged from 30-78 years, 7.23% had never gone to school². S. Ramakrishnan et al showed that out of the total participants 33.2% were females, mean age was 40±14.9 years³.

In this study participants had answered wrongly to questions related to knowledge (Table-1) about normal blood pressure reading, term high blood pressure, complications due to uncontrolled blood pressure, heredity of hypertension, role of antihypertensive in lowering blood pressure below normal where as participants had answered coorectly to questions related to knowledge (Table-1) about excessive salt, alcohol, over weight as a risk factors in development hypertension, symptoms of high blood pressure, antihypertensive as a lifelong medication, necessity of regular blood pressure reading in high blood pressure patients.

A.K. Das et al mentioned in their study that most of the hypertensive patients did not have the knowledge of normal blood pressure reading (70.38%), most of them had knowledge that regular blood pressure measurement was necessary (72.96%), excessive salt intake was one of the risk factors for developing high blood pressure(63.52%)². As per A. Tausif et al even though having knowledge about high salt intake, increased body weight and lack of physical activity being risk factors for hypertension most of the subjects only occasionally moderated their salt intake (75%) and merely 29% subjects performed physical activity, fewer than that checked their body weight (4%) most of the subjects occasionally missed their medication (46%)⁴. R. Sadeq et al highlighted that 60.1% of the hypertensive patients had good knowledge⁶.

This study shows positive attitude (Table-2) of the participants towards importance of regular checking of blood pressure, reduction of salt intake to prevent hypertension, regular follow-up to doctor, regular medication and exercise in hypertensive patients.

A.K. Das et al showed that more than 50% of the hypertensive patients gave correct answers to the entire attitudes questions². A. Tausif et al mentioned in their study that majority of hypertensive patients gave correct responses on the attitude scale where it was evident that people realize the need for reducing salt intake in their diet (97%), regular checking blood pressure (86%) and exercising for a healthy life (97%)⁴. R. Sadeq et al highlighted that 80% of hypertensive patients expressed good attitude⁶.

In this study majority of participants practices following good practices (Table-3) like frequently measurement of blood pressure, moderating their salt intake and consultation with health care providers also they occasionally miss the dose of medication, they do not consume alcohol, they do not smoke and chew tobacco. Whereas some of the participant's practices following bad practices (Table-3) they do not avoid fatty food consumption, do not perform physical exercise, do not check body weight.

A.K. Das et al found that most of the hypertensive patients followed good practices except doing regular exercise where only 29.87% patients followed this². According to A. Tausif et al it was the scores of self-care practice that were in contrast to the other two parameters and showed that the subjects had other two parameters and showed that the subjects had poor self-care practices which in turn can be a cause of their uncontrolled blood pressure⁴. R. Sadeq et al highlighted that only one quarter (24%) of hypertensive patients recorded good practices⁶.

CONCLUSION

In this study hypertensive patient taking treatment in OPD at Rural Health Training Centre have relatively less knowledge, positive attitude and good practices towards the hypertension management.

RECOMMENDATIONS

Repeated enforcement and motivation along with health education will definitely bring about positive change in knowledge, attitude and Practices.

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