

Original Research Article

Knowledge and perception of hypertension among hypertensive patients attending rural health and training centre, department of community medicine, SRMC & RI

Puveearasan Kongarasan*, Pankaj B. Shah

Department of Community Medicine, Sri Ramachandra Medical College and Research Institute, Tamil Nadu, India

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***Correspondence:**

Dr. Puveearasan Kongarasan,
E-mail: puvee16@gmail.com

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ABSTRACT

Background: Hypertension is the most common treatable risk factor. Efforts have been made to raise the awareness of hypertension. Globally about one billion people have high blood pressure, of those two-thirds are in developing countries. In 2025, an estimated 1.56 billion adults will be living with hypertension. It is called as the “silent killer” because it often has no warning signs or symptoms. There is a lack of clear understanding of the current state of knowledge, attitudes, and perceptions about hypertension among patients and public. Objectives of the study were to assess the knowledge and perception of hypertension among hypertensive patients attending rural health and training centre (RHTC), Vayalanallur, Tamil Nadu.

Methods: This is a hospital based, cross-sectional, observational study to assess the awareness of hypertension among hypertensive patients attending NCD clinic during the month of June 2016. After IEC approval, fifty participants who gave written consent were included and the study was conducted using a questionnaire covering knowledge and perception aspects of hypertension in one-to-one interviews.

Results: The mean age of participants is 55.6 ± 10.06 with illiterate of 18% and 37.1% unemployed. More than half of the participants were female 64%. Knowledge about the causes of hypertension were 94%, Perception that hypertension can be cured completely was 78% with periodic check-up was 74%, hypertension can be controlled with treatment was 90% and medication to be taken regularly was 100%.

Conclusions: Knowledge and perception about hypertension is good and the thrush has to be given regarding the practice on control of blood pressure. Thus, health education programme might help the participants to prevent the complications of hypertension and for good adherence to treatment.

Keywords: Hypertension, Knowledge, Perception, Rural area

INTRODUCTION

Focusing on risks to health is key to preventing disease and injury.¹ One of the leading causes of death in India and worldwide is the non communicable diseases (NCDs). It represents as a global, national as well as economic development threat and the Governments, non-government organisations (NGOs) have declared as a chronic global epidemic.⁶ By 2030 their burden is

expected to double.⁶ One of the most important public health challenge remains to be hypertension worldwide because of the morbidity and mortality.² Hypertension is one of the most important risk factors for cardiovascular morbidity and mortality which results from target - organ damage in the heart, kidney, and eyes.^{3,4} Globally 13% of all deaths, 7.1 million premature deaths each year is due to hypertension.⁵ Analysis of the global burden shows 25% of adults in 2000 had hypertension and the

proportion is expected to increase in 2025 by 29%.^{2,3} According to research, by the year 2025 the larger proportion of the population with hypertension will be from economically developing countries due to larger population proportion and lifestyle changes.²

Objective

- To assess the knowledge and perception of hypertension among hypertensive patients attending Rural Health and Training centre, Vayalanallur.

METHODS

This was a hospital based, observational, cross sectional study to assess the knowledge and perception of hypertension among hypertensive patients attending Rural Health and Training centre (RHTC), Department of Community Medicine, Sri Ramachandra Medical college and Research Institute, Vayalanallur, belonging to Poonamallee block in Thiruvallur district Tamil Nadu, India.

The study was conducted among hypertensive patients attending the non communicable disease (NCD) clinic during the month of June 2016. Around 500 patients were registered in the NCD clinic. Fifty participants gave written consent and they were included in the study.

The purpose of the study was explained by the principal investigator to each participant and prior to the study a written consent was obtained from the participants. The participation was explained to be voluntary and that they could withdraw at any time without any consequences from the interview. Every effort was made, to be sure that all information collected from the participants, remain confidential.

The information from the participants were obtained from a semi-structured interview. The questionnaire comprised of three sections covering socio-demographic details, knowledge and perception components about hypertension. Data collection was done through one-to-one interview.

Statistical analysis

Statistical Package for Social Sciences (SPSS) 16 version software was used for data entry and analysis. Proportion of hypertension having awareness on different aspects like causes, symptoms, treatment, prevention and self care were calculated as percentage.

Ethical issues

Institutional Ethics Committee of Sri Ramachandra Medical College and Research Institute, has approved this study (REF: CSP – MED/16/MAR/28/41) dated 29.03.2016.

RESULTS

The mean age of participants is 55.6±10.06. More than half of the participants were female 64%. Among them 18% were illiterate and 37.1% were unemployed. It was observed that 24% of participants were diagnosed to have hypertension for less than 1 year, 50% between 1-5 years, 16% between 5-9 years and 10% more than 10 years. Around 36% of the participants had family history of hypertension.

Table 1: Socio-demographic profile of the participants.

Character	Numbers (%)
Sex	
Male	18 (36)
Female	32 (64)
Education	
Illiterate	9 (18)
Primary school	5 (10)
High school	20 (40)
Higher secondary	13 (26)
Graduate	2 (4)
Post graduate	1 (2)
Occupation	
House Wife	15 (30)
Security	2 (4)
Driver	4 (8)
Farmer	7 (14)
Private company	6 (12)
Unemployed	16 (32)
Years of HTN	
<1 year	12 (24)
1-5 years	25 (50)
5-9 years	8 (16)
>10 years	5 (10)
Family history	
Yes	18 (36)
No	32 (64)
Smoking	
Yes	8 (16)
No	42 (84)
Alcohol consumption	
Yes	9 (18)
No	41 (82)
Other chronic illness	
Diabetes mellitus	11 (22)
Bronchial asthma	6 (12)
None	33 (66)
F/H/O CVA	
Yes	4 (8)
No	46 (92)
F/H/O CAD	
Yes	6 (12)
No	44 (88)

In this study 22% of the participants were diabetic and 12% suffered from Bronchial asthma. 16% had habit of smoking, while 18% had history of alcohol consumption (Table 1).

Knowledge and perception about hypertension

About 94% had knowledge about the causes of Hypertension, 96% about the symptoms, accurate method for monitoring 96%, mode of treatment 96%, 76% about the parts mainly affected by hypertension and 90% had the knowledge about the symptoms of hypertension (Table 2).

Table 2: Knowledge of HTN.

Particulars	Correct responses in no. (%)
Knowledge components	
Hypertension is caused by	47 (94)
Common symptoms of HTN	48 (96)
Accurate method for monitoring	48 (96)
Uncontrolled HTN-BP is	46 (92)
Mode of treatment	48 (96)
Parts mainly affected	38 (76)
Screening for complication	49 (98)
Symptoms of HTN	45 (90)

Table 3: Perception of HTN.

Particulars	Correct responses in no. (%)
Perception components	
HTN can be cured completely	39 (78)
HTN and food inter-related	40 (80)
HTN and exercise inter-related	34 (78)
Symptoms can be controlled	15 (30)
Periodic check-up	37 (74)
Medication regularly	50 (100)
How often you monitor BP	50 (100)
Modified diet after HTN	37 (74)
Physical activity	36 (72)
Aware of ECG for heart	38 (76)
How often you check eye/lipid	28 (56)
HTN can be controlled with treatment	45 (90)

78% of participants believed hypertension can be cured completely, 80% were correct about the inter-relationship between food and hypertension and 78% between exercise and hypertension. Also 74% believe that periodic check-up is more essential and 100% believed taking medication regularly is compulsory. 74% believed diet has an effect on hypertension and 72% believed physical activity has effect on hypertension. Also 76% were aware of electrocardiogram (ECG) for monitoring heart functions. 90% believed hypertension can be controlled with treatment (Table 3).

DISCUSSION

The first step in formulating a preventive programme involves obtaining information about the disease. To aid in future development of the different techniques and programmes, investigating KAP of the disease among general population is necessary.⁷ For evaluating intervention programmes, KAP surveys are effective in providing baseline information.⁷ The study was undertaken among hypertensive patients, to assess their knowledge and perception among hypertension. The mean age of participants is 55.6±10.06 and is comparable with the study done by Vikneswari et al were the mean age is 52.58±13.36.⁸ In this study majority of the patients were females. Also 18% of the participants were illiterate and 37.1% were unemployed and is comparable with the study done by Pragnesh et al shows 42.2% of the participants were females and 28% were illiterate.⁹ 50% of the participants were between 1-5 years of having hypertension. In this study about 36% has family history of hypertension and 64% has no family history of hypertension, whereas study done by Seham et al shows 74.3% history of hypertension in the family.¹⁰

In this study 94% know about the causes of hypertension and 96% know about the accurate method of measurement and is comparable with the study done by Godfrey et al which shows 86% about the causes and 80% about the method of measurement.¹¹

In this study 78% believed hypertension can be cured completely while study done by Susan et al shows 28.9% belief that hypertension can be cured completely.¹²

In this study 78% believes regular exercise and hypertension are inter-related and is comparable with the study done by Pragnesh et al which shows 63.6% and Shibiru et al shows 67.7% participants who believes exercise reduces hypertension.^{9,14}

90% of the participants believes that hypertension can be controlled with treatment while study done by Pragnesh et al shows 72% belief that hypertension can be controlled with treatment.⁹

In this study, majority of the participants were aware that regular physical exercise, diet will help in control of hypertension. This could be because this study was conducted in the NCD Clinic and most of the participants were aware of the disease.

CONCLUSION

Knowledge and perception about hypertension is good and the thrush has to be given regarding the practice on control of blood pressure. Thus, health educational materials, intense behavioural modifications and incorporating health literacy and competence will bring benefit to the participants to prevent the complications of hypertension and for good adherence to treatment.

Recommendations

The study shows the desired attitude level attained was not because of inadequate advice given by the physicians. Furthermore, motivation by health care providers should be done and health programmes to be intensified for delivering proper information regarding hypertension, its causes and symptoms to diagnose the disease as early as possible and educate about various lifestyle modifications like change in diet, physical activity and weight control. The implementation of life style modifications to control patient's blood pressure and its complications should be enforced by public authority, NGOs and other sectors in health services.

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