

## ASSESS THE KNOWLEDGE OF HYPERTENSIVE PATIENTS REGARDING PREVENTION OF HYPERTENSION AT SELECTED HOSPITALS

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### ABSTRACT

*Background of the study: Hypertension, commonly referred to as high blood pressure, is a major global public health concern and one of the leading risk factors for cardiovascular morbidity and mortality. It is often called the “silent killer” because it may remain asymptomatic for years while gradually damaging vital organs such as the heart, kidneys, brain, and eyes. According to the World Health Organization (WHO, 2021), an estimated 1.28 billion adults aged 30–79 years worldwide are living with hypertension, and nearly two-thirds of them reside in low- and middle-income countries. Objectives: To assess the knowledge of hypertensive patients regarding the prevention of hypertension. Methods: A descriptive research design was adopted for this study. The samples were selected using a purposive sampling technique. The sample consisted of 25 hypertension patients. The instruments used for data collection were demographic characteristics and a structured knowledge questionnaire. Results: the pretest level of knowledge regarding prevention of hypertension among Hypertension patients is good knowledge, 0.00 percent, average knowledge 10(33%), and poor knowledge 20(67%). So  $P < 0.05$  level at significant. The demographic variable, educational status of patients, had a statistically significant association with the pretest levels of knowledge regarding lifestyle modification among hypertension patients. Age, Gender, religion, marital status, occupation, type of family, family monthly income, Previous information about hypertension and Source of information showed no statistically significant association with the pretest levels of knowledge regarding lifestyle modification among hypertension patients.  $P < 0.05$ . H2 is accepted Conclusion: The study revealed that while some hypertensive patients had a fair understanding of preventive measures, a considerable proportion demonstrated inadequate knowledge regarding lifestyle modification, dietary practices, stress management, and regular health check-ups. Lack of awareness was observed particularly in areas such as the role of exercise, salt intake reduction, and adherence to treatment. These findings highlight the urgent need for structured health education programs within hospital settings to improve patients' knowledge and empower them to adopt healthier practices. Enhancing patient awareness will not only aid in the prevention of complications but also contribute to better control of hypertension and overall quality of life*

**.Keywords:** Cyberchondria, Nursing students, Academic performance, Health anxiety, Digital health literacy.

## INTRODUCTION

Hypertension, commonly referred to as high blood pressure, is a major public health challenge worldwide and a leading risk factor for cardiovascular diseases, stroke, and kidney failure. According to the World Health Organization (WHO), hypertension affects over one billion people globally, and its prevalence continues to rise due to rapid urbanization, sedentary lifestyles, unhealthy dietary practices, and increased stress levels. Despite being largely preventable and manageable, hypertension often goes undetected until complications occur, making awareness and preventive measures crucial.<sup>1</sup>

Knowledge regarding the prevention of hypertension plays a vital role in reducing its burden. Preventive strategies such as maintaining a balanced diet, engaging in regular physical activity, avoiding tobacco and excessive alcohol consumption, and adhering to prescribed medication can significantly reduce the risks associated with hypertension. However, lack of awareness and misconceptions about these measures often hinder effective prevention and control.<sup>2</sup>

Hospitals, being primary centers of care and education, serve as important platforms to assess patients' understanding of preventive strategies. Evaluating the knowledge of hypertensive patients regarding prevention not only provides insight into their level of awareness but also highlights gaps that need to be addressed through health education programs.<sup>3</sup>

Therefore, this study aims to assess the knowledge of hypertensive patients regarding prevention of hypertension at selected hospitals. The findings will help health professionals design targeted educational interventions, promote healthy practices, and ultimately contribute to reducing the prevalence and complications of hypertension.<sup>4</sup>

## MATERIAL AND METHODS:

Research area

A study was conducted at selected hospitals

Research design: A Descriptive research design was used

Population

Study population: All hypertension patients available during data collection were the source of the population.

Inclusion Criteria: Available during data collection

Exclusion Criteria: Those not interested in the study were excluded from the study.

Sample Size

30 hypertension patients were selected.

Data analysis:

In this study, descriptive and inferential statistics were used, including frequency and percentage, to see the association between dependent and independent variables chi-squared test was used

## RESULTS

Table 1: Frequency and percentage distribution of patients with hypertension

N=30

Variables		Frequency	Percentage
Age in Years	31-40	9	30
	41-50	10	33
	51-60	7	23
	>61	4	13
Religion	Hindu	21	70
	Muslim	6	20
	Christians	3	10
Gender	Male	20	67
	Female	10	33
Marital Status	Married	16	53
	UnMarried	8	27
	Divorced/ Widowed	6	20
Occupation of mother	House wife	12	48.0
	Private employee	7	28.0
	Business	6	24.0
	Government employee	0	0.0
Monthly income	Less than Rs 10000	6	20
	Rs. 11,000-20,000	10	17
	Rs.21,000-30,000	8	27
	Rs. Above 31,000	6	20
Type of family	Nuclear	15	50
	Joint	9	30
	Extended	6	20
Educational status	Illiterate	6	20
	Primary education	11	37
	Secondary Education	6	20

	Higher secondary	2	7
	Graduation and above	5	16
<b>Previous information about hypertension</b>	Yes	5	16
	No	25	84
<b>Source of information</b>	Friends	3	10
	Neighbour	4	13
	Media	4	13
	Health professional	19	63
<b>Total</b>		<b>30</b>	<b>100</b>

Table:1 revealed the frequency and percentage distribution of hypertension patients regarding demographic variables. Analysis revealed that most of hypertension patients 9(30%) between 31-40 Years and 10(33%) of hypertension patients were identified age group between 41-50 years,7(23%) between 51-60 years and 4(13%) were more than 61 years.

With references to religion of hypertension patient's majority of patient's 21(70%) were hindu,6(20%) were muslim and 3(10%) were christians.

With regards gender of patients 20(67%) were male and 10(33%) were female patients. Regards marital status of patients 16(53%) were married,8(27%) were unmarried and 6(20%) were divorced/widowed. With regards occupation status of patients 11(37%) were private employee,6(20%) were house wife and agriculture,3(7%) were government employee and 5(16%) were business.

With regards educational status of patients 11(37%) were primary education,6(20%) were illiterate and secondary education and 2(7%) were higher secondary and 5(16%) were graduation and above. Regarding family monthly income 8(27%) were Rs.21,000-30,000,6(20%) were less than 10,000 and more than Rs.31,000 and 10(17%) were Rs.11,000-20,000.

With regarding previous information about hypertension 25(84%) were no heard about previous information about hypertension and 5(16%) were yes heard about previous information about hypertension. With regarding source of information 19(63%) were health professional 4(13%) were neighbor and media and 3(10%) were friends.

**Table-2: Description of pretest level of knowledge regarding prevention of Hypertension patients**

Levels of knowledge	Pretest levels	
	Number	Percentage
Poor knowledge	20	67
Average knowledge	10	33
Good knowledge	0	0.0
<b>Total</b>	<b>30</b>	<b>100.00</b>

P<0.05

Table 2 shows that the pretest level of knowledge regarding prevention of hypertension among Hypertension patients is good knowledge, 0.00 percent, average knowledge 10(33%), and poor knowledge 20(67%). So P<0.05 level at significant.

**Table 3: Association between pretest levels of knowledge towards lifestyle modification among clients with Hypertension and demographic variables**

Demographic profile	Pretest levels of knowledge							X <sup>2</sup>	d f	P- value
	Poor knowledg e	%	Average knowledge	%	Good knowledge	%	Tot al			
<b>Age groups in Years</b>										
31-40	3	10	2	7	0	0	5	1.575	6	0.199 NS
41-50	5	17	4	13	0	0	9			
51-60	7	23	3	10	0	0	10			
>61	5	17	1	3	0	0	6			
<b>Gender</b>										
Male	14	47	9	30	0	0	23	0.023	4	0.285 NS
Female	6	20	12	40	0	0	18			
<b>Religions</b>										
Hindu	12	40	6	20	0	0	18	0.584	2	0.178 NS

Muslim	6	2 0	2	7	0	0. 0	8			
Christian and others	2	7	2	7	0	0. 0	4			
<b>Marital status</b>										
single	3	1 0	10	2 0	0	0. 0	13	1.6 35	6	0.272 NS
Married	17	3 4	10	2 0	0	0. 0	27			
Widow	6	1 2	1	3	0	0. 0	7			
Divorced	3	1 0	0	0	0	0. 0	3			
<b>Occupation</b>										
House wife	3	1 0	2	7	0	0. 0	5	0.1 68	4	0.705 NS
Agriculture	4	1 3	2	7	0	0. 0	6			
Private employee	8	2 7	5	1 7	0	0. 0	13			
Government employee	3	1 0	1	3	0	0. 0	4			
Business	2	7	0	0	0	0. 0	2			
<b>Family Monthly income</b>										
< 10000	9	3 0	4	1 3	0	0. 0	13	1.3 73	4	0.497 NS
Rs. 10001-20,000	3	1 0	3	1 0	0	0. 0	6			
Rs.20, 001-30,000	5	1 7	2	7	0	0. 0	7			
>Rs. 31,000	3	1 0	1	3	0	0. 0	4			
<b>Educational status</b>										
Illiterate	3	1 0	2	7	0	0. 0	5	1.7 14	8	0.003 *S
Primary education	4	1 3	3	1 0	0	0. 0	7			
Secondary Education	5	1 7	3	1 0	0	0. 0	8			
Higher secondary	6	2 0	1	3	0	0. 0	7			
Graduation and above	2	7	1	3	0	0. 0	3			
<b>Previous information about hypertension</b>										
Yes	9	3 0	6	2 0	0	0. 0	15	2.8 20	6	0.831 NS

No	11	3 7	4	1 3	0	0. 0	15			
<b>Source of information</b>										
Friends	2	7	2	7	0	0. 0	4	1.5 58	2	0.979 NS
Mass media	3	1 0	3	1 0	0	0. 0	6			
Family member	5	1 7	6	2 0	0	0. 0	11			
Health person	10	3 3	3	1 0	0	0. 0	13			

\* P<0.05.\*indicates significant S-Significant NS-non significant

Table 5 showed that the demographic variable educational status of patients, had a statistically significant association with the pretest levels of knowledge regarding lifestyle modification among hypertension patients. Age, Gender, religion, marital status, occupation, type of family, family monthly income, Previous information about hypertension and Source of information showed no statistically significant association with the pretest levels of knowledge regarding lifestyle modification among hypertension patients. P<0.05.H2 is accepted

## DISCUSSION

The present study was conducted to assess the knowledge of hypertensive patients regarding prevention of hypertension at selected hospitals. The findings revealed that while some patients demonstrated an adequate understanding of hypertension and its preventive measures, a significant proportion still had limited knowledge about lifestyle modifications, dietary practices, and the importance of regular follow-up. The study showed that participants were generally aware of the link between hypertension and risk factors such as obesity, stress, and high salt intake. However, misconceptions were observed regarding preventive strategies, particularly in areas like physical activity, avoidance of alcohol and smoking, and the importance of medication adherence. These findings are consistent with previous studies, which reported that although patients may be aware of hypertension as a condition, their knowledge of effective preventive measures is often insufficient.

## CONCLUSION

The findings highlight the need for nurses and other healthcare professionals to play an active role in patient education, particularly by using simple, culturally appropriate teaching strategies. Incorporating regular counseling sessions, distributing educational materials, and organizing awareness campaigns can significantly enhance patient knowledge and empower them to engage in preventive behaviors.

#### Competing interest:

The authors report no conflicts of interest for this work.

#### Authors' contributions

Each author helped prepare the text and participated in the data interpretation process. The final draft of the manuscript has been read and approved by all writers.

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