



# Effectiveness Of Structured Educational Programme On Knowledge Regarding Prevention Of Hypertensive Complications Among Hypertensive Patients Residing In Selected Area At Sikar

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**Abstract:** A study conducted effectiveness of structured educational programme on knowledge regarding prevention of hypertensive complications among hypertensive patients residing in selected area at Sikar. **Material & Method:** The quantitative research approach and pre- experimental one group pre test post test design was adopted for this study. Non probability convenience sampling technique was used for sample selection. The data were observed from 300 hypertensive patients. The study was conducted at Radhakrishnan Pura, Kishan Colony, Veer Teja Colony, Jaldhari Nagar, Sikar. Structured question tool was used to gather the data. Through SPSS, both descriptive and inferential statistics were used for data analysis. **Results:** Result showed that during pre-test majority 175(58.3%) had average knowledge and 118(39.3%) had poor knowledge & 6(2%) had good knowledge where as in post-test maximum 208(69.3%) had good knowledge and 84(28%) had average knowledge & 8(2.7%) had poor knowledge regarding prevention of hypertensive complications among hypertensive patients. Result on knowledge showed that post-test mean knowledge score  $17.70 \pm 2.62$  was higher than mean pre-test knowledge score  $9.42 \pm 2.42$  with mean difference of 8.28 with calculated value ( $t=41.93$  at  $df=299$ ,  $p=0.001$ ) was found significant.

**Key words:** Effectiveness, structured educational programme, prevention of hypertensive complications. hypertensive patients.

## INTRODUCTION

Hypertension, simply put, is high blood pressure. It is defined as a persistent elevation of the systolic blood pressure at a level of 140 mmHg and of diastolic blood pressure of 90 mmHg or higher.<sup>1</sup>

Hypertension is the leading cause of cardiovascular disease. Worldwide prior to 1990, population data suggest that hypertension prevalence was decreasing; however, recent data suggest that it is research. Hypertension prevalence has also been increasing in other countries and an estimate 972 million patients in are suffering from this problem. Incidence rates of hypertension range between 3-18 depending age, gender, ethnicity, body size of population studied. Despite advances in hypertension treatment control rates continue to be suboptimal.<sup>2</sup>

Half of the patients diagnosed with hypertension have borderline to mildly high BP for the cause, diet and lifestyle changes, including regular exercise, stress management and self monitoring with a home BP device, can be used to control and bring down the BP with no side effects. However, if you have elevated BP, you have to take medication to bring down and then implement lifestyle changes to make sure that the BP stags low.<sup>3</sup>

High blood pressure is a silent killer. It usually shows no symptoms and many patients do not realize they have it. High blood pressure, also known as raised blood pressure or hypertension increases the risk of heart attacks, strokes and kidney failure. Even moderate elevation of arterial blood pressure is associated with a shortened life expectancy. If left uncontrolled, high blood pressure can also cause blindness, irregularities of the heart beat and heart failure.<sup>4</sup>

The first line of treatment for hypertension is identical to the recommended preventive lifestyle changes and includes dietary changes, physical exercise, and weight loss. Dietary change such as a low sodium diet is beneficial. Also, the diet, a diet rich in nuts, whole grains, fish, poultry, fruits and vegetables, lower blood pressure.<sup>5</sup>

A major feature of the plan is limiting intake of sodium, although the diet is also rich in potassium, magnesium, calcium, as well as protein. Some programs aimed to reduce psychological stress such as biofeedback or transcendental meditation may be reasonable add- one to other treatment to reduce hypertension. However, several techniques such as yoga, relaxation and other forms of meditation do not appear to reduce blood pressure.<sup>6</sup>

## PROBLEM STATEMENT

Effectiveness of structured educational programme on knowledge regarding prevention of hypertensive complications among hypertensive patients residing in selected area at Sikar.

## OBJECTIVES

1. To assess pre-test knowledge score regarding prevention of hypertensive complications among hypertensive patient.
2. To develop structured educational programme regarding prevention of hypertensive complications to increase the knowledge level of hypertensive patient.
3. To assess post-test knowledge score regarding prevention of hypertensive complications among hypertensive patients.

4. To evaluate the effectiveness of structured educational programme on prevention of hypertensive complications among hypertensive patients.
5. To find out the association between the pre-test knowledge score with their selected demographic variables.

## **MATERIALS AND METHOD**

### **Research Approach**

The research approach adopted for present study was quantitative research approach

### **Research Design**

In this study pre-experimental one group pre-test post-test design. was adopted to assess the knowledge.

### **Population**

Population is the entire aggregation of cases that meets a designated set of criteria for research. The target population of the present study was hypertensive patients residing in selected area at Sikar.

### **Research setting:**

The study was conducted at Radhakrishnan Pura, Kishan Colony, Veer Teja Colony, Jaldhari Nagar, Sikar.

### **Sample Size**

A total sample for this study was 300 hypertensive patients residing in selected area at Sikar.

### **Sampling Technique**

Non probability convenience sampling technique was used to select the sample for this study.

### **Sampling criteria**

#### **Inclusion criteria**

- Hypertensive patients who have 30 to above 60 years of age.
- Patient present at the time of data collection.
- Patient who can read and understand English, Hindi.

#### **Exclusion criteria:**

- The patient who are not willing to participate in the study.
- Hypertensive patients are critically ill.
- Those who are belong to medical profession.

## **ETHICAL CONSIDERATIONS**

- The permission was obtained from ethical committee of Nirwan University, Jaipur.
- Permission was obtained from concerned area authority for conducting the research study.
- The consent was taken from the subjects attendees. To gain their confidence, they were ensured that research data will be kept confidential and will be used for only research purpose.
- The purpose of the study will be explained to the subjects attendees. They were also informed about their right to refuse from participation in the study.

**Plan for data analysis:** The data analyses were done according to the study objectives by using descriptive and inferential statistics. The plans of data analysis were as follows:

- Frequency, percentage, mean, and standard deviation was calculated.
- The chi-square test was used for association with demographic variables.

## RESULTS AND DISCUSSION:

### SECTION - I

**Table 1: Frequency and percentage distribution of the Socio-demographic variables**

**N=300**

S. No	Demographic Variables	Frequency	Percentage
1	Age in years		
	a. 30-40 years	23	7.7
	b. 40-50 years	60	20
	c. 50-60 years	99	33
	d. Above 60 years	118	39.3
2	Gender		
	a. Male	188	62.7
	b. Female	112	37.3
3	Religion		
	a. Hindu	208	69.4
	b. Muslim	79	26.3
	c. Christian	13	4.3
4	Type of family		
	a. Nuclear	194	64.7
	b. Joint	88	29.3
	c. Extended	18	6
5	Marital status		
	a. Married	223	74.4
	b. Unmarried	67	22.3
	c. Divorcee	7	2.3
	d. Widower	3	1
6	Educational status		
	a. Primary	41	13.7
	b. Secondary	71	23.7
	c. Higher secondary	88	29.3
	d. Graduate and above	100	33.3
7	Occupational status		
	a. Self employed	79	26.3
	b. Private job	173	57.7
	c. Government job	33	11
	d. Others	15	5
8	Monthly income (Rs)		
	a. Below Rs.10000/-	53	17.7
	b. Rs. 10001- 20,000/-	72	24
	c. Rs. 20,001- 30,000/-	88	29.3
	d. Above Rs. 30,000/-	87	29
9	Dietary pattern		

	a. Vegetarian	260	86.7
	b. Non-vegetarian	40	13.3
10	Family history of hypertension		
	a. Yes	73	24.3
	b. No	227	75.7
11	Take medication on regular basis		
	a. Yes	267	89
	b. No	33	11

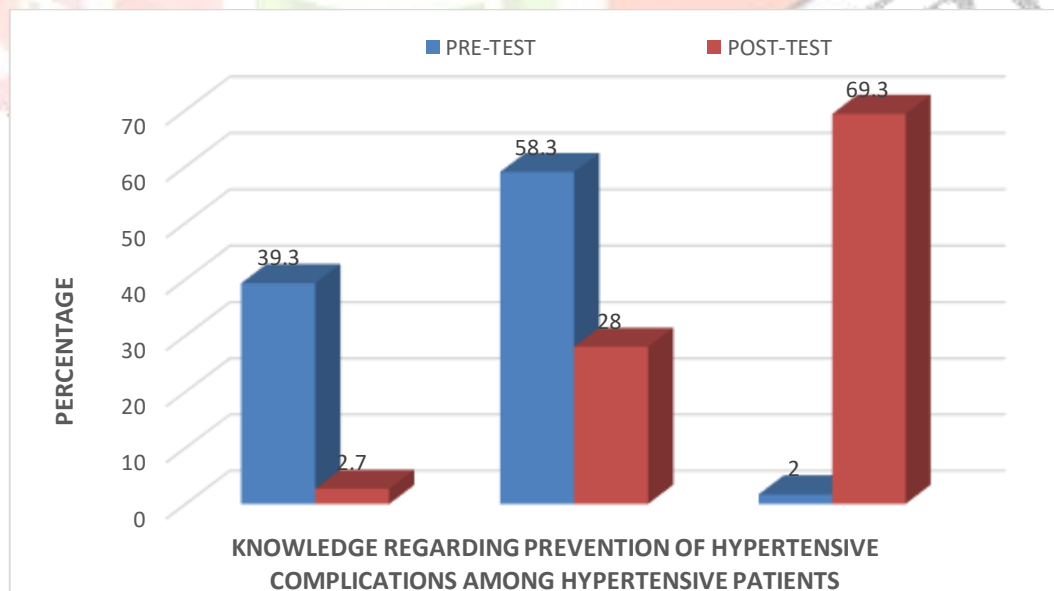
## SECTION – II

**Table 2: Distribution of pre-test and post-test level of knowledge regarding prevention of hypertensive complications among hypertensive patients**

**N=300**

Level of knowledge	Pre-test		Post-test	
	f	%	f	%
Poor knowledge	118	39.3	8	2.7
Average knowledge	175	58.3	84	28
Good knowledge	6	2	208	69.3

Result showed that during pre-test majority 175(58.3%) had average knowledge, 118(39.3%) had poor knowledge and 6(2%) had good knowledge where as in post-test maximum 208(69.3%) had good knowledge, 84(28%) had average knowledge and 8(2.7%) had poor knowledge regarding prevention of hypertensive complications among hypertensive patients.



**Fig 1: Distribution of pre-test and post-test level of knowledge regarding prevention of hypertensive complications among hypertensive patients**



## SECTION III

**Table 3: Descriptive statistics of pre-test and post-test scores of knowledge regarding prevention of hypertensive complications among hypertensive patients**

N=300

Descriptive statistics	Pre-test	Post-test
Minimum	4	9
Maximum	16	23
Range	12	14
Mean	9.42	17.70
Median	9	18
Mode	8	17
Std. Deviation	2.42	2.62

## SECTION - IV

**Table 4: Effectiveness of structured educational programme on knowledge regarding prevention of hypertensive complications among hypertensive patients**

N=300

Effectiveness	Mean	SD	Mean D	t value	df	p value
Pre-test	9.42	2.42	8.28	41.93	299	0.001*
Post-test	17.70	2.62				

\*P&lt;0.05 level of significance

NS-Not significant

Result on knowledge showed that post-test mean knowledge score  $17.70 \pm 2.62$  was higher than mean pre-test knowledge score  $9.42 \pm 2.42$  with mean difference of 8.28 with calculated value ( $t=41.93$  at  $df=299$ ,  $p=0.001$ ) was found significant.

## SECTION - V

**Table 5: Association between the pre-test level of knowledge regarding prevention of hypertensive complications among hypertensive patients with selected demographic variables**

N=300

Demographic variables	Pre-test knowledge			$\chi^2$ value	df	p value
	Poor	Average	Good			
Age in years						
a. 30-40 years	8	12	1	3.753	6	0.710 <sup>NS</sup>
b. 40-50 years	23	36	1			
c. 50-60 years	35	61	3			
d. Above 60 years	52	65	1			
Gender						
a. Male	72	114	2	1.464	2	0.481 <sup>NS</sup>
b. Female	46	63	3			
Religion						
a. Hindu	86	118	4	3.893	4	0.421 <sup>NS</sup>
b. Muslim	25	53	1			
c. Christian	7	5	1			
Type of family						
a. Nuclear	70	120	4	4.262	4	0.372 <sup>NS</sup>
b. Joint	42	45	1			
c. Extended	6	11	1			
Marital status						
a. Married	96	125	2	8.254	6	0.245 <sup>NS</sup>
b. Unmarried	16	49	2			
c. Divorce	4	2	1			
d. Widower	1	1	1			
Educational status						
a. Primary	17	23	1	17.50	6	0.007*
b. Secondary	26	43	2			
c. Higher secondar	48	39	1			
d. Graduate and above	27	70	3			
Occupational status						
a. Self employed	33	43	3	7.457	6	0.281 <sup>NS</sup>
b. Private job	70	101	2			
c. Government job	8	24	1			
d. Others	7	7	1			
Monthly income (Rs)						

a. Below Rs.10000/-	19	33	1	3.126	6	0.793 <sup>NS</sup>
b. Rs. 10001- 20,000/-	28	42	2			
c. Rs. 20,001- 30,000/-	33	54	1			
d. Above Rs. 30,000/	38	47	2			
Dietary pattern						
a. Vegetarian	110	145	5	8.605	2	0.014*
b. Non-vegetarian	8	31	1			
Family history of hypertension						
a. Yes	31	41	1	0.423	2	0.809 <sup>NS</sup>
b. No	87	136	4			
Do you know about hypertension complication						
a. No	107	155	5	1.327	2	0.515 <sup>NS</sup>
b. Yes	11	21	1			

\*P&lt;0.05 level of significance

NS-Not significant

Table 5 depicts the association between the pre-test level of knowledge regarding prevention of hypertensive complications among hypertensive patients with selected demographic variables which was tested by using chi square test. Result showed that educational status and dietary pattern were found significant association at  $p<0.05$  level but other demographic variables such as age, gender, religion, type of family, marital status, occupational status, family income, Family history of hypertension and Do you know about hypertension complication were found to be not significant at  $p<0.05$  level with pre-test level of knowledge regarding prevention of hypertensive complications among hypertensive patients.

## CONCLUSION

Result on knowledge showed that post-test mean knowledge score  $17.70\pm2.62$  was higher than mean pre-test knowledge score  $9.42\pm2.42$  with mean difference of 8.28 with calculated value ( $t=41.93$  at  $df=299$ ,  $p=0.001$ ) was found significant.

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