



## **A Study to Assess the Effectiveness of Information Education and Communication Package on Knowledge and Attitude Towards Controlling Blood Pressure among Clients with Primary Hypertension in Selected Hospital of Bhuj - Kutch (Gujarat)**

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### **ABSTRACT**

#### **Background of the study:**

Hypertension has become a significant problem in many developing countries experiencing epidemiological transition from communicable to non-communicable chronic diseases. Recently globalization, Hospitalization and industrialization are changing the occupational morbidity drastically. Hypertension is defined as systolic blood pressure 140 mm of Hg, mean diastolic 90 mm of Hg or currently taking anti-hypertensive medications.

The cost of antihypertensive medicines is very high and takes up a large and rising share of healthcare resources. High BP detection and control are seriously vital for decreasing the risk of strokes and heart attacks.

India is a developing country, According to International Labor Organization (ILO), work has become more dangerous than decades ago. The prevalence pattern of hypertension in developing country is different from that in the developed countries.

#### **Materials & Methods**

Pre experimental research design used in present study with 100 clients with primary hypertension in selected hospitals of Bhuj - Kutch. Non Probability convenient sampling technique was used in the study, 25 self structured knowledge questioners & 10 practice check list were used to assess knowledge & attitude of adult clients with primary hypertension.

#### **Conclusion**

Data was collected by using self prepared structured interview schedule. Data was analysed and interpreted by applying respective statistical methods. The conclusion of the study was drawn on the basis of major findings which are as follows- majority of the respondent were in the age group of 35-45 years and all were Hindu. Highest percentage of respondents was female with monthly income of Rs 5001-15000/- month. The overall mean knowledge score among respondents found to be pre test was 10.9 and post test was 17.14 The overall mean attitude score among respondents found to be pre test was 43.72 and post test was 55.2. The enhancement in both knowledge and attitude is very much required.

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## KEYWORDS

*IEC package, Knowledge, Attitude, Controlling of Blood Pressure, Primary Hypertension*

## INTRODUCTION

Health is the level of activity or function of the body of a living person. In humans, it is a normal state of mind and body, usually meaning relief from illness, injury, or pain. Health is defined as the state of complete physical, mental and social well-being and not just the absence of disease or illness (World Health Organization, 1946).

Hypertension is becoming a global epidemic and threat to the world population. Hypertension is one of the most common chronic diseases and one of the most critical health problems causing death as single contributor in developed and developing countries<sup>1,2</sup>.

## RESEARCH METHODOLOGY

According to Abdellah (1979) research methodology involves the systematic procedure by the researcher which starts from initial identification of the problem to its final conclusion. The research approach is a quantitative, experimental research approach used in this study. The research design selected for the present study was the pre experimental research design that was used in this study. The population of the study were the patients admitted in selected hospitals of Bhuj City in Gujarat with primary hypertension and falling in the age group of 35 to 65 years. Non probability convenient sampling technique was used in this study. The tools used for the study include socio-demographical Performance, a structured knowledge questionnaire & an attitude check list regarding prevention of hypertension.

Guide sheet was prepared regarding prevention of Primary Hypertension. A pilot study was conducted on a client with hypertension, 35-65 years old, at Accord Hospital Bhuj – Kutch. For this study the investigator took into consideration the ethical issues. No ethical issues against conducting the study.

### Data Analysis and Interpretation

The findings based on descriptive and inferential statistical analysis are presented as follows.

Section I: Description of demographic variables of patients with primary hypertension.

Section II: Description of pretest and post test level of knowledge and attitude towards controlling of blood pressure among clients with primary hypertension.



Section III: Comparison of pretest and post test knowledge score and attitude score in controlling blood pressure among patients with primary hypertension.

Section IV: Correlation between pretest and post test knowledge score and attitude score. Section

V: Association of demographic variables with pretest knowledge and attitude score regarding controlling of blood pressure.

## Section – I

**Table 1** Description of demographic variables of patients with primary hypertension

S. No.	Demographic Variables	Frequency (f)	Percentage (%)
1.	Age		
	a) 35 - 45 years	28	28%
	b) 46 - 55 years	42	42%
	c) 56 - 65 years	30	30%
2.	Gender		
	a) Male	40	40%
	b) Female	60	60%
3.	Religion		
	a) Hindu	86	86%
	b) Muslim	14	14%
	c) Christian	0	0
	d) Others	0	0
4.	Education		
	a) Illiterate	4	4 %
	b) Primary	52	52 %
	c) Secondary	30	30 %
	d) Higher secondary	10	10 %
	e) Graduate	4	4 %
5.	Occupation		
	a) Unemployed	50	50
	b) Business	38	38
	c) Technical work	8	8
	d) Professional	4	4
6.	Marital status		
	a) Married	82	82
	b) Single	2	2
	c) Divorcee	0	0
	d) Widow/ widower	16	16
7.	Monthly income		
	a) Below Rs. 5000/-	12	12
	b) Rs. 5001- 15,000/-	42	42
	c) Rs.15,001- 25,000/-	40	40
	d) Above Rs. 25,001/-	6	6
8.	Place of residence		
	a) Rural	34	34
	b) Urban	48	48
	c) Semi urban	18	18
9.	Type of family		
	a) Nuclear	56	56
	b) Joint	44	44

## Section - II



Table 2 Description of Pretest and Post test Level of Knowledge in Controlling Blood Pressure among the Clients with Primary Hypertension. (n = 100)

S. No.	Knowledge Level	Pretest		Post Test	
		f	%	f	%
1.	Poor Knowledge	50	50	0	0
2.	Adequate Knowledge	50	50	84	84
3.	Good Knowledge	0	0	16	16

Table 2 shows that among 100 patients with primary Hypertension, 50 (50%)

had poor knowledge and 50 (50%) had adequate level of knowledge in pretest. In post test, 84 (84%) gained adequate level of knowledge and 16 (16%) had good level of knowledge.

### Section – III

Table 3 Descriptions of pretest and post test attitude level in controlling blood pressure among the clients with primary hypertension.

S. No.	Attitude Level	Pretest		Post Test	
		f	%	f	%
1.	Unfavourable attitude	2	2	0	0
2.	Moderately favourable attitude	98	98	58	58
3.	Most favourable attitude	0	0	42	42

Table 3 shows that (2%) patient had unfavorable attitude and (98%) patients had moderately favourable attitude in pretest. In post test, (58%) patients had moderately favorable attitude and (42%) of them had most favorable attitude.

Table 4 Distribution of Statistical Value of Pretest and Post Test Knowledge Score in Controlling Blood Pressure (n = 100)

S. No.	Knowledge	Mean	S.D	't' Value	Level of Significance
1.	Pretest	10.9	3.26	22.62*	0.05
2.	Post test	17.14	2.93		

Table 4 shows that the calculated value of “t” is 22.62 at 99 (df) which is greater than the table value (t=2) is significant at 0.05 level of significance. Therefore there is significant difference between pretest and post test mean score. It implies that the knowledge score of patients with primary hypertension in controlling their blood pressure was improved significantly after intervening IEC package.

### Section – IV

S. No.	Attitude	Mean	S.D	't' Value	Level of Significant
1.	Pre test	43.72	3.55	18.97*	0.05



2.	Post test	55.2	2.19
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**Table 5** Distribution of Statistical Value of Pretest and Post Test Attitude Score in Controlling Blood Pressure (n = 100)  
Table 5 shows that the calculated value of „t“ is 18.97 at 99 (df) which is greater than the table value (t= 2), is significant at 0.05 level of significance. Therefore there is a significant difference between the pretest and post test mean score. It implies that the attitude towards controlling blood pressure was improved significantly after the IEC package.

**Table 6** Correlation between pretest knowledge score and attitude score regarding controlling blood pressure (n = 100)

S. No.	Pretest	Mean	S.D	r
1.	Knowledge	10.9	3.26	+0.36
2.	Attitude	43.72	3.55	

Table 6 shows that there is a positive correlation between the knowledge score and attitude score in pretest.

**Table 7** Correlation between post test knowledge score and attitude score regarding controlling blood pressure (n = 100)

S. No.	Post Test	Mean	S.D	r
1.	Knowledge	17.14	2.93	+0.13
2.	Attitude	55.2	2.19	

Table 7 shows that there is positive correlation between the knowledge score and attitude score towards controlling blood pressure in post test.

## Section - V

**Table 8** Association of demographic variables with pretest knowledge score in controlling blood pressure (n = 100)

S. No.	Demographic Variables	Frequency	P - value	Chi	Significant
1.	Age				
	a) 35 - 45 years	28	0.01	2.16	Not Significant
2.	Gender				
	a) Male	40	0.00109	10.666	Significant
	b) Female	60			
3.	Religion				
	a) Hindu	86			Not Significant
	b) Muslim	14	0.39316	2.99	Significant
4.	Education				
	a) Illiterate	4			
	b) Primary	52	0.106556	7.6195	Not Significant
	c) Secondary	30			
	d) Higher secondary	10			
	e) Graduate	4			
5.	Occupation				
	a) Unemployed	50	0.592504	1.9043	Not Significant
	b) Business	38			
	c) Technical work	8			
	d) Professional	4			
6.	Marital status				
	a) Married	82	0.93845	0.127	Not Significant
	b) Single	2			
	c) Divorcee	0			
	d) Widow/ widower	16			



7.	Monthly income				
	a) Below Rs. 5000/-	12			
	b) Rs. 5001-15,000/-	42	0.000805	16.7246	Significant
	c) Rs. 15,001-25,000/-	40			
d) Above Rs. 25,001/-	6				
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8.	Place of residence				
	a) Rural	34	0.831421	0.3692	Not Significant
	b) Urban	48			
c) Semi urban	18				
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9.	Type of family				Not Significant
	a) Nuclear	56	0.08082	3.0483	
	b) Joint	44			
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10.	Dietary pattern				
	a) Vegetarian	4	0.307434	1.0417	Not Significant
b) Non-vegetarian	96				

Table 8 shows the association of knowledge score with selected demographic variables by Chi test. Gender and Monthly income are associated with pre test knowledge score but Age Religion, education, occupation, marital status, place of residence, type of family and dietary pattern are not associated with pre test knowledge score.

#### Major Findings of the Study were as follows

- The pre-test mean value of knowledge was 10.9
- The post test mean value of knowledge was 17.14
- The obtained “t” value for comparison of knowledge score at  $p < 0.05$  level was 22.62
- The pre-test mean value of attitude was 43.72
- The post test mean value of attitude was 55.2
- The obtained “t” value for comparison of attitude score at  $p < 0.05$  level was 18.97
- The correlation between knowledge score and attitude score in pre-test was +0.36
- The correlation between knowledge score and attitude score in post test was +0.13
- The demographic variables Association of knowledge score with selected demographic variables by  $\chi^2$  test. Gender and Monthly income are associated with pre test knowledge score but age, religion, education, occupation, marital status, place of residence, type of family, and dietary pattern are not associated with pre test knowledge score.



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