

Effectiveness of Comprehensive Educational Package on Knowledge Regarding Promotion of Health and Prevention of Complication among Hypertensive Patients at Selected Hospital, Tamilnadu

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ABSTRACT

Aim: to assess the effectiveness of a comprehensive educational package on knowledge regarding promotion of health and prevention of complications among hypertensive patients.

Objectives: (i) To assess the pre and post test level of knowledge regarding promotion of health and prevention of complications among hypertensive patients. (ii) To evaluate the effectiveness of a comprehensive educational package on knowledge regarding promotion of health and prevention of complications among hypertensive patients. (iii) To find out the association between the post test level of knowledge on the promotion of health and prevention of complications with selected socio-demographic variables of patients with hypertension.

Methodology: A Pre experimental research design was carried out in this study. 60 samples were selected by using non-probability purposive sampling technique. The pre and post test level of knowledge was assessed by using structured knowledge questionnaires.

Results: The pre test mean was 11.5 with a standard deviation of 3.24 and the post test mean was 24.37 with a standard deviation of 2.98. The mean difference of pre and post test is 12.87; standard error is 0.29. The 'T' value is 44.37 is Highly Significant at $p < 0.05$ it indicates that the knowledge level of hypertensive patients regarding promotion of health and

prevention of complications was increased after the comprehensive educational package.

Conclusion: The study concluded that the level of knowledge among hypertensive patients is increased after giving a comprehensive educational package and it proved that a comprehensive educational package increases the level of knowledge.

Keys Words: Comprehensive educational package

INTRODUCTION

Hypertension is a condition in which the force of the blood against the artery walls becomes high. Usually, hypertension is defined as blood pressure above 130/80mm.hg. and considered severe if the pressure is above 180/120 mm. hg. Hypertension is an invisible killer that rarely causes symptoms but is an important public health challenge because of its high prevalence and concomitant risk of coronary artery disease, heart failure, cerebrovascular diseases, and chronic renal failure.

High blood pressure is called the silent killer because it often has no warning signs or symptoms, and many people do not know they have it. Complications of hypertension are clinical outcomes that result from persistent elevation of blood pressure. Hypertension is a risk factor for all clinical manifestations of atherosclerosis. It

is an independent predisposing factor for heart failure, coronary artery disease, stroke, kidney disease, and peripheral arterial disease. It is the most important risk factor for cardiovascular morbidity and mortality.

Complications affecting the heart left ventricular hypertrophy, hypertensive cardiomyopathy, and myocardial infarction. hypertensive heart disease is the result of structural and functional adaptations leading to left ventricular hypertrophy, diastolic dysfunction, abnormalities of blood flow due to atherosclerotic coronary artery disease and microvascular disease, and cardiac arrhythmias.

Complications affecting the brain hypertension are an important risk factor for brain infarction and hemorrhage. Approximately 85% of strokes are due to infarction and the remainder is due to haemorrhage, either intracerebral haemorrhage or subarachnoid haemorrhage. The incidence of stroke rises progressively with increasing blood pressure levels, particularly systolic blood pressure in individuals >65years. Treatment of hypertension convincingly decreases the incidence of both ischemic and hemorrhagic strokes.

Complications affecting the eye are hypertensive retinopathy is a condition characterized by a spectrum of retinal vascular signs in people with elevated blood pressure.

Hypertension is a risk factor for chronic kidney disease and end-stage kidney disease. The risk appears to be more closely related to systolic than diastolic blood pressure, and black men for developing ESRD at every level of blood pressure. Preventing high blood pressure: healthy living habits by living a healthy lifestyle, can help keep your blood pressure in a healthy range and lower your risk for heart disease and stroke.

OBJECTIVES

- To assess the pre and post test level of knowledge regarding promotion of

health and prevention of complications among hypertensive patients.

- To evaluate the effectiveness of a comprehensive educational package on knowledge regarding promotion of health and prevention of complications among hypertensive patients.
- To find out the association between the post test level of knowledge on the promotion of health and prevention of complications with selected socio-demographic variables of patients with hypertension.

HYPOTHESIS

H1: There will be a significant increase in post test knowledge scores than the pre test knowledge score on the promotion of health and prevention of complications among hypertensive patients.

H2: There will be a significant association between the post test level of knowledge on the promotion of health and prevention of complications with selected socio-demographic variables of patients with hypertension.

METHODOLOGY

A Pre experimental research design study was carried out in this study. 60 samples were selected by using non-probability purposive sampling technique. The pre and post test level of knowledge was assessed by using structured knowledge questionnaires.

RESULT AND DISCUSSION

Assessment of pre and post test pre and post test level of knowledge on the promotion of health and prevention of complications among hypertensive patients.

Table 4.2.1: Frequency and percentage distribution of pre test level of knowledge among hypertensive patients. N = 60

Level of Knowledge	Frequency	Percentage
	N	N%
Inadequate Knowledge	52	86.7%
Moderate Knowledge	7	11.7%
Adequate Knowledge	1	1.6%

Table 4.2.1 shows that pre test level of knowledge among 60 samples 52 (86.7%) had inadequate Knowledge; 7

(11.7%) had moderate knowledge and 1 (1.6%) had adequate knowledge.

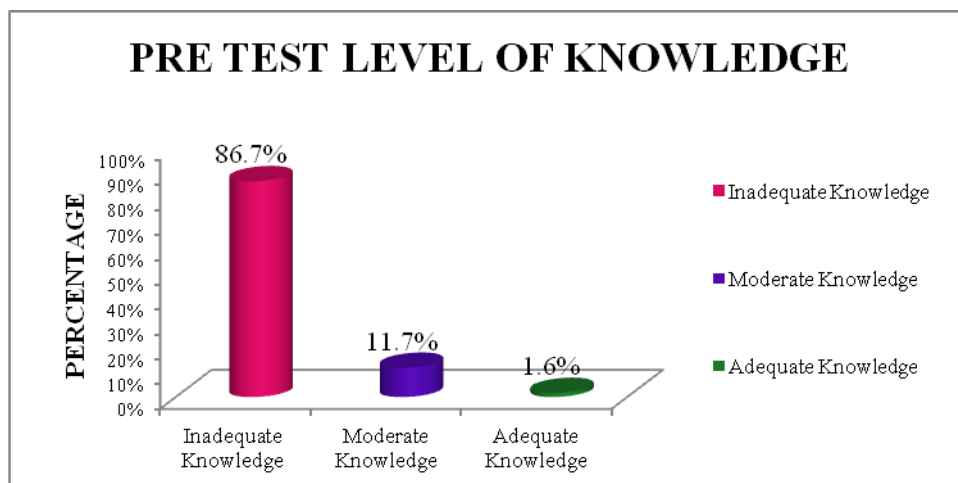


Figure 4.2.1 shows percentage distribution of pre test level of knowledge among hypertensive patients.

Table 4.2.2: frequency and percentage distribution of post test level of knowledge among hypertensive patients. N = 60

Level of Knowledge	Frequency		Percentage	
	N	N%	N	N%
Inadequate knowledge	0	0%	0	0%
Moderate knowledge	17	28.3%	17	28.3%
Adequate knowledge	43	71.7%	43	71.7%

Table 4.2.2: shows that post test level of knowledge among 60 samples none of them had inadequate knowledge; 17(28.3%) had moderate knowledge and 43 (71.7%) had adequate knowledge.

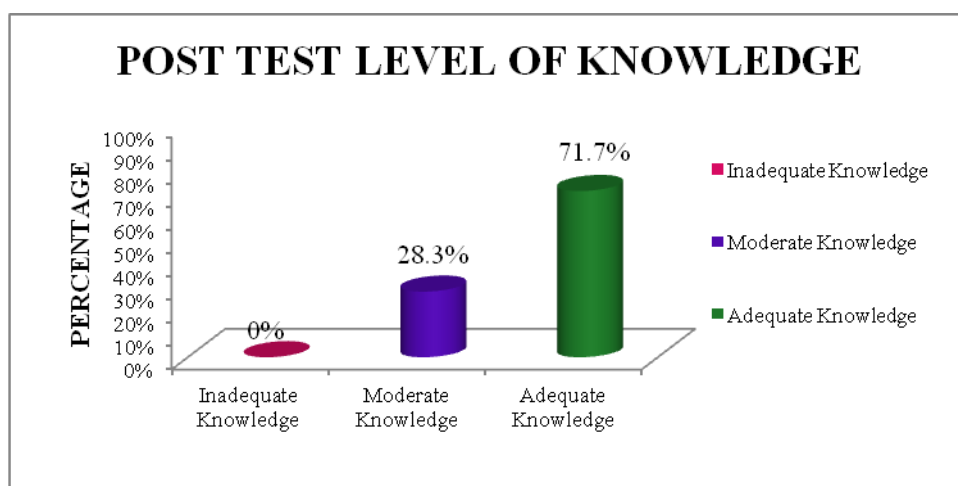


Figure 4.2.2 shows percentage distribution of post test level of knowledge among hypertensive patients.

Effectiveness of comprehensive educational package on knowledge regarding promotion of health and prevention of complications among hypertensive patients.

Table 4.3 Effectiveness of comprehensive educational package on knowledge regarding promotion of health and prevention of complications among hypertensive patients. N=60

Pre test		Post test		Mean difference	Standard error	'T' value
Mean	Standard deviation	Mean	Standard deviation			
11.5	3.24	24.37	2.98	12.87	0.29	44.37*HS

Table 4.3 reveals that pre test mean was 11.5 with the standard deviation of 3.24 and the post test mean was 24.37 with the standard deviation of 2.98. The mean difference of pre and post test is 12.87; standard error is 0.29. The 'T' value is 44.37 is Highly Significant at $p < 0.05$ it

indicates that the knowledge level of hypertensive patients regarding promotion of health and prevention of complication was increased after the comprehensive educational package. Hence hypothesis H1 is accepted.

Association between the post test level of knowledge on promotion of health and prevention of complications with selected socio demographic variables of Hypertensive patient.

Table 4.4.1 Association between the post test level of knowledge on promotion of health and prevention of complications with selected demographic variables Hypertensive patient. N=60

S. No	Demographic Variables	Inadequate	Moderate	Adequate	Chi square	p-value
1	Age of mother				1.64	0.949 NS
	a.<40 years	0	1	7		
	b.41 – 50 years	0	6	17		
	c.51 – 60 years	0	7	14		
	d. 61 and above	0	3	5		
2	Sex				0.99	0.61 NS
	a. Male	0	10	31		
	b. Female	0	7	12		
3	Educational qualification				34.22	0.000037 S*
	a. Illiterate	0	7	0		
	b. Primary	0	7	4		
	c. High school	0	1	12		
	d. Higher secondary	0	2	15		
	e. Graduate	0	0	12		
4	Occupation				5.92	0.43 NS
	a. Agriculture	0	3	11		
	b. Business	0	7	10		
	c. Profession	0	2	16		
	d. Un employee	0	5	6		
5	Residence				0.287	0.866 NS
	a. Urban	0	7	21		
	b. Rural	0	10	22		
6	Family monthly income				0.482	0.998 NS
	a. < Rs.5000	0	0	0		
	b. Rs 5000- Rs 10000	0	0	0		
	c. Rs 10001- Rs 15000	0	1	1		
	d. Rs 15001- Rs 20000	0	9	24		
	e. > Rs 20000	0	7	18		
7	Source of information				1.927	0.926 NS
	a. Health Worker	0	7	23		
	b. Family Members	0	7	10		
	c. Mass media	0	3	10		
	d. friends	0	0	0		

Table 4.4.1 shows that there is significant association between the post test level of knowledge and educational qualification and there is no significant association between the Age, Sex, Occupation, Residence, Family Monthly income and Source of Information.

DISCUSSION

Frequency and percentage distribution of hypertensive patients according to their Demographic and clinical variables

Frequency and percentage distribution of demographic variables of hypertensive patients among 60 samples majority of them 23 (38.4%) were in age group of 41-50 years; 41 (68.3%) were Male; 19(31.7%) were studied Higher Secondary; 18(30%) were professional

workers; 32(53.3%) were lives in Rural; 33 (55%) were belongs to Rs 15001- Rs20000; 30 (50%) were got information through Health Workers.

Frequency and percentage of distribution of clinical variables of hypertensive patients among 60 samples majority of them 23 (38.3%) were in > 5 years of duration of illness; 45 (75%) were has no family history of hypertension; 58 (96.6%) were under regular treatment; 36(60%) were had no comorbidities; 50(83.3%) were has no any bad habits; 28(46.7%) were performing physical exercise for sometimes.

The first objective of the study is to assess the pre and post test level of knowledge regarding promotion of health and prevention of complication among hypertensive patients.

The pre test level of knowledge among 60 hypertensive patients 52 (86.7%) had inadequate Knowledge 7 (11.7%) had moderate knowledge and 1 (1.6%) had adequate knowledge. The post test level of knowledge among 60 hypertensive patients none of them had inadequate knowledge 17(28.3%) had moderate knowledge and 43 (71.7%) had adequate knowledge.

The second objective of the study to evaluate the effectiveness of comprehensive educational package on knowledge regarding promotion of health and prevention of complications among hypertensive patients

The pre test mean was 11.5 with the standard deviation of 3.24 and the post test mean was 24.37 with the standard deviation of 2.98. The mean difference of pre and post test is 12.87; standard error is 0.29. The 'T' value is 44.37 is Highly Significant at $p < 0.05$ it indicates that the knowledge level of hypertensive patients regarding promotion of health and prevention of complication was increased after the comprehensive educational package. Hence hypothesis H1 is accepted.

The third objective of the study is to find out the association between the post test level of knowledge on promotion of health and prevention of complications with selected socio demographic and clinical variables

In demographic variables there was a significant association between the post test level of knowledge and educational qualification with the chi square value 34.22; p-value is 0.000037 and there is no significant association between the Age, Sex, Occupation, Residence, Family Monthly income and Source of Information.

In clinical variables there is significant association between the post test level of knowledge and habit of hypertensive patient's chi square value 49.66; p-value is 0.00001 and there is no significant association between the Duration of illness, Family history, Comorbidities, Performing Physical Exercise. Hence hypothesis H2 is accepted.

CONCLUSION

The findings of the study show that among hypertensive patients the knowledge scores of pre test mean was 11.5 with the standard deviation of 3.24 and the post test mean was 24.37 with the standard deviation of 2.98. The mean difference of pre and post test is 12.87; standard error is 0.29. The 'T' value is 44.37 is Highly Significant at $p < 0.05$ it indicates that the knowledge level of hypertensive patients regarding promotion of health and prevention of complication was increased after the comprehensive educational package. The study concluded that the level of knowledge among hypertensive patients are increased after giving comprehensive educational package and its proved that comprehensive educational package increases the level of knowledge.

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