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Research Paper

Effectiveness of Planned Teaching Program on Knowledge Regarding Lifestyle Modification to Control Hypertension Among Hypertensive Patient

Nursing

KEYWORDS :

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ABSTRACT

Cardiovascular disease is the world leading killer disease. Among them hypertension is one of the common disease causing stroke death. Methodology :evaluative research approach and pre experimental one group pretest post test design without control group was used for the study .Results : finding of the study revealed that during pre test out of 60 samples majority of the samples ,76.7% had inadequate knowledge , 23.3% had moderate knowledge and none of them had adequate knowledge , whereas in post test majority of the samples 78% had adequate knowledge . The mean post test knowledge score was 78 % and a standard deviation of 2.1 which was significantly higher than the mean pretest knowledge score 35.7% and a standard deviation of 2.8. It shows there was a significant association between post test knowledge scores of hypertensive patient regarding life style modificaion of hypertension with their socio demographic variables like gender, religion and life style modification , for hypertension at 0.05 level of significance.

Introduction

Life is not merely to be alive, but to be healthy and wealthy. Every day we hear about new diseases and get fear and panicked. Despite incredible improvement in health since 1950, there are still a number of challenges , and cardiovascular disease remains among the leading causes of death worldwide .hypertension is a very common condition under cardiovascular diseases . High blood pressure or Hypertension does immense harm to the body in the form of Target organ damage ,hence the WHO has named it silent killer .

As of 2000, nearly one billion people or 26% of the adult population of the world had hypertension . It was common in both developed (333 million) and under developed (639 million) countries.

Cardiovascular diseases caused 2.3 million deaths in India in the year 1990. This is projected to double by the year 2020. Hypertension is directly responsible for 57% of all stroke deaths and 24% of all coronary heart disease death in India . hypertension prevalence is lower in rural Indian population although there has been a steady increase overtime here as well. Recent studies have shown high prevalence of hypertension among urban adults. There is a strong correlation between changing lifestyle factors and increase in hypertension in India .

The prevalence of hypertension in the last six decades has increased from 2% to 25% among urban residents and from 2% to 15% among the rural residents in India .according to directorate general of health services ,ministry of health and family welfare , government of India , the overall prevalence of hypertension in india by 2020 will be 159/1000 population.

Lifestyle modification is indicated for all patients with hypertension, regardless of drug therapy , because it may reduce or even abolish the need for antihypertensive drugs. In addition to the immediate goal of lowering blood pressure , the recommended lifestyle changes confer a range of lowering blood pressure , the recommended lifestyle change confer a range of health benefits , including better outcomes of common chronic diseases .[3] Healthy life style changes are an important first step for lowering blood pressure . Making lifestyle adjustments is key to maintaining normal blood pressure.

Statement of the problem

A study to evaluate the effectiveness of planned teaching program on knowledge regarding lifestyle modification to control hypertension among hypertensive patient residing in selected rural areas Bangalore.

Objectives

- To assess the pre existing level of knowledge regarding life style modification to control hypertension among hypertensive patients .
- To determine the effectiveness of planned teaching program (PTP) on knowledge regarding lifestyle modification to control hypertension among hypertensive patients
- To find the association between pretest knowledge score with their selected demographic variables.

HYPOTHESIS

H_1 : The post test knowledge scores will be significantly higher than the pretest knowledge score.

H_2 : There will be significant association between post test knowledge score with their selected demographic variables.

ASSUMPTION

The Study assumes that

1. The hypertensive patient may have some knowledge on lifestyle modification to control hypertension.
2. Planned teaching program will improve the knowledge of hypertensive patients regarding lifestyle modification to control hypertension.
3. The knowledge on lifestyle modification to control hypertension may have the relation with demographic variables.

Research approach and Design

An evaluative research approach Pre-experimental design

Dependent Variable

In this study knowledge level of hypertensive patients regarding life style modification to control hypertension is the dependent variable.

Independent Variables

In this study, the planned teaching programme regarding life style modification is the independent variable.

Setting of the study

The study was conducted at Avathi PHC. It consists of 80000 population.

Population

The study population consists of:

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Target population: In this study, target population consists of all hypertensive patients living in rural area, Bangalore.

Accessible Population: In this study, accessible population consists of hypertensive patients residing in selected rural area at Bangalore..

Sample
Sample consists of the subjects selected to participate in a research study. In the present study, samples are the hypertensive patients who fulfill the inclusion criteria.

Sampling technique
In this study, purposive sampling technique was used to select the samples based on inclusion and exclusion criteria.

Sample size
Sample comprises of 60 hypertensive patients residing in the selected rural area at Bangalore.

Sampling criteria
Inclusion criteria
The study includes patient who
- are willing to participate in the study
- are available at the time of data collection
- can understand English or Kannada

Exclusion criteria
The study excludes patient who
- are critically ill
- underwent similar intervention recently

Data Collection Instrument
A structured knowledge questionnaire was used for data collection.
In this study the data collection will be done by structured interview schedule.
SECTION A- It consists of socio demographic profile like age**,** gender**,** religion, education, marital status, occupation, family income/ month, dietary pattern, family history of hypertension, lifestyle modification adopted for hypertension and exposure to information are the socio demographic variables**.**
SECTION B- It consists of structured knowledge questionnaire regarding general information on hypertension and life style modification like diet, exercise, weight reduction, smoking cessation, cessation of alcohol and stress reduction.

Reliability of the tool:
The reliability of the structured knowledge questionnaire was established by using split half method. In order to establish the reliability, the tool was administered to 6 patients having hypertension residing in rural area who fulfilled the inclusion criteria. The reliability quotient obtained for the tool was 0.82.

Data Collection Procedure:
Formal written permission was obtained from concerned authorities before data collection. The data collection period was one month at the convenience of the respondents.

The subjects were assembled. The purpose of the study was explained to them and confidentiality was taken from all the patients having hypertension by explaining the purpose of study.

The data was collected in the following phases:
Phase 1:
In this phase, pre-test was conducted on a total of 60 hypertensive patients by structured interview schedule regarding selected life style modification to control hypertension and instructions were given on answering the questionnaire and doubts were clarified. Each client took 20-30 minutes to answer demographic data and the questionnaire.

Phase II:
In this phase, a PTP regarding selected complementary therapies was conducted to the subjects and explained to them. All the questions or queries were clarified which were asked by the subjects.

Phase III:
In this phase, post test was conducted on 7th day after administration of the PTP; the same structured interview schedule was used. During the conduction of the study there was no problem aroused and subjects were co operative to conduct the study. The investigator thanked and appreciated all the subjects for their goodwill. The collected data was compiled for analysis.

Processing of the data:
Data collected was processed every day. Missed out data were identified and immediately rectified the next day.

Ethical Consideration: Written permission from the authorities of the PHC and informed consent from the subjects were obtained before conducting the study. No ethical issue confronted while conducting the study.

Results
Table 1.Frequency and Percentage distribution of demographic variables of hypertensive patients by personal characteristics n=60

Characteristics	Category	Respondents	
		Number	Percent
Age Group (years)	30-40	9	15.0
	41-50	20	33.3
	51-60	25	41.7
	>60	6	10.0
Gender	Male	27	45.0
	Female	33	55.0
Education	No formal education	9	15.0
	Primary	18	30.0
	Secondary	5	8.3
	PUC	18	30.0
	Graduation and above	10	16.7
Marital status	Unmarried	2	3.3
	Married	50	83.3
	Widow/Widower	5	8.4
	Divorced	3	5.0
Occupation	Government	18	30.0
	Private	20	33.3
	House wife	22	36.7
Total		60	100.0

Table-1 depicts the frequency and percentage distribution of hypertensive patient by age, gender, education, marital status and occupation. The findings indicated that 15% of the patient falls within 30-40 years, 33.3% are within 41-50 years, 41.7% are within 51-60 years and another 10% falls above 60 years. With regards to gender, majority of the patient were female 55% and 45% were male. Regarding education 15% had no formal education, 30% were primary, 8.3% were secondary, 30% were PUC and 16.7% were graduates and above. Regarding marital status 3.3% of them were unmarried, 83.3% were married, 8.4% were widow/widower and 5% of them were divorced. Regarding occupation 30% were government employee, 33.3% were private employer, 36.7% were house wife.

Table 2 Over all Pre test and Post test Mean Knowledge on life style modification among Hypertensive Patients n=60

Aspects	Max. Score	Respondents Knowledge				Paired 't' Test
		Mean	SD	Mean (%)	SD (%)	
Pre test	30	10.08	2.8	35.7	10.0	30.41*
Post test	30	21.75	2.1	78.1	7.1	
Enhancement	30	11.64	3.0	40.1	10.3	

* Significant at 5% level,
t (0.05, 59df) = 1.96

The above table projects the overall pre test, post test and enhancement of mean knowledge scores regarding lifestyle modification.

The mean pre test knowledge was 35.7% with SD 10%. The mean post test knowledge found to be 78.1% with SD 7.1%. However, the enhancement was proved as mean (40.1%) and SD of (10.3%). Further, the paired t-test value (30.41*) shows statistical significance at level of p< 0.05 with df (59), establishing the effectiveness of Structured Teaching Programme.

Table 3 Association between Demographic variables and Pre test Knowledge level on Life style modification among Hypertensive Patients.n=60

Demographic Variables	Category	Sample	Knowledge Level				χ^2 Value	P Value
			Inadequate		Moderate			
			N	%	N	%		
Age Group (years)	30-40	9	7	77.8	2	22.2	0.19 NS	P> 0.05
	41-50	20	15	75.0	5	25.0		
	51-60	25	19	76.0	6	24.0		
	>60	6	5	83.3	1	16.7		
Gender	Male	27	24	88.9	3	11.1	4.10*	P< 0.05
	Female	33	22	66.7	11	33.3		
Education	No formal education	9	6	66.7	3	33.3	1.24 NS	P> 0.05
	Primary	18	13	72.2	5	27.8		
	Secondary	5	4	80.0	1	20.0		
	PUC	18	15	83.3	3	16.7		
	Graduation and above	10	8	80.0	2	20.0		
Marital status	Unmarried	2	2	100.0	0	0.0	1.75 NS	P> 0.05
	Married	50	37	74.0	13	26.0		
	Widow/ Widower	5	4	80.0	1	20.0		
	Divorced	3	3	100.0	0	0.0		
Occupation	Government	18	14	77.8	2	22.2	1.67 NS	P> 0.05
	Private	20	17	85.0	3	15.0		
	House wife	22	15	68.2	7	31.8		
Religion	Christian	13	12	82.3	1	7.7	7.22*	P< 0.05
	Hindu	37	29	78.4	8	21.6		
	Muslim	10	5	50.0	5	50.0		
Family Income/ month	Rs.5,000-10,000	16	13	81.3	3	18.7	0.77 NS	P> 0.05
	Rs.10,001-15,000	20	14	70.0	6	30.0		
	Above Rs.15,000	24	19	79.2	5	20.8		
Dietary Pattern	Vegetarian	26	20	76.9	6	23.1	0.13 NS	P> 0.05
	Non-vegetarian	7	5	71.4	2	28.6		
	Mixed	27	21	77.8	6	22.2		
Family History of Hypertension	Yes	56	42	75.0	14	25.0	1.30 NS	P> 0.05
	No	4	4	100.0	0	0.0		
Life style modification adopted for Hypertension	Yes	16	9	56.3	7	43.7	5.08*	P< 0.05
	No	44	37	84.1	7	15.9		
Combined		60	46	76.7	14	23.3		

*Significant at 5% Level,
NS : Non-sign

The table presents the association of pre test level of knowledge with selected demographic variables. The Chi-square test was carried out to determine the association between the pre test knowledge and demographic variables such as age, gender, religion, education, marital status, occupation, family income/ month, dietary pattern, family history of hypertension, complementary therapy adopted for hypertension, previous exposure to information and type of source. Out of which gender,(χ^2= 4.10*), religion (χ^2= 7.22*) and life style modification adopted for hypertension (χ^2= 5.08*) were found to be significantly associated with pre test knowledge at 5% level and the rest of the demographic variables were not significant. Hence research hypotheses H_2 is proved and accepted for gender, religion and life style modification adopted for hypertension and rejected for others

Nursing Implication

Nursing Education

- Nursing education helps the nurse to excel in theoretical as well as practical level. In this present study, the nurse educator gives priority to uphold the value of education. Nurse educators need to pay emphasis on lifestyle modification.
- Teaching strategies such as demonstration, use of charts, pictures, and power point presentation can be used to train the patient.
- This can be implemented by integrating the knowledge regarding lifestyle modification in all level of curriculum in nursing education.

Nursing Practice

- A regular health education program should be carried out by nurse educator regarding lifestyle modification.
- Nursing working in hospitals should provide adequate information regarding lifestyle modification..
- The result of the study will help the nurses to enlighten their knowledge on importance of health education.

Nursing Administration

- Ongoing training can be planned and provided regarding lifestyle modification to staffs and make everyone conscious and understand rules and issues. They should develop policies, guidelines and relevant information, education and training regarding life style modification.
- Nurse administrators have more responsibility as supervisor on creating awareness by facilitating free distribution of booklets, handouts, charts regularly to patients in and outpatient department of hospitals and health clinics.

Nursing Research

- The nurse researcher can utilize this study in developing a nursing model, theory, evidence based care. Present study helps nurses and other health care personnel to understand the level of knowledge of care givers regarding lifestyle modification
- Student nurse researcher also can be motivated to conduct studies in this area.

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Limitations of the Study

- The sample size is limited to 60 patients having hypertension residing in selected rural area, Bangalore. Hence generalization is possible only to the selected settings.
- Duration of data collection is limited to 4-6 weeks.
- Randomization was not done. So the sample may not be the true representation of the population
- Due to time constraint purposive sampling technique was used.

Conclusion

Hypertension is the most leading cause of the Non communicable disease. It can be controlled with lifestyle modification measures in a effective manner. It is a vital role for the nursing personnel to teach the hypertensive patient about the lifestyle modification.

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