A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Complementary Therapy on Management of Hypertension among Hypertensive Patients Attending to Shirur Primary Health Centre Bagalkot District

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ABSTRACT

Background of the Study: Hypertension is a cardiovascular disorder in which a person having high blood pressure over time. Those who are new to illness deal with fear, sorrow, and also lack of knowledge of the family members leads to more complications like recurrence. A study to assess the effectiveness of Structure Teaching Programme on knowledge regarding complementary therapy on management of hypertension among hypertensive patients attending to Shirur primary health center Bagalkot district.

Objectives:
1. A study to assess the Knowledge regarding complementary therapy on management of hypertension among hypertensive patient.
2. To assess the effectiveness of Structure Teaching Programme regarding complementary therapy on hypertension among hypertensive patients
3. To find out the association between post test knowledge score with selected socio-demographic variables.

Methodology: The pre-experimental one group pre test post test design was adopted for the present study. The sample for the present study includes 40 people from selected primary health centre Shirur at Bagalkot District using simple random sampling technique. The data collected using structure close ended questionnaire and data was analyzed using descriptive and inferential statistics.

Results: The levels of knowledge regarding complementary therapy on management of hypertension among hypertensive patients. Reveals that, most of pre test people (92.5%) had average knowledge (7.5%) them had poor knowledge. Whereas in post test majority people (67.5) of the people had good knowledge level (32.5%) of them had very good knowledge.

Similarly significant association was found between knowledge of hypertensive patients and demographic variables like gender (χ^2=1.11; $p<0.05$) education (χ^2=5.19; $p<0.05$) occupation (χ^2=3.56; $p<0.05$) types of family (χ^2=0.80; $p<0.05$).

Conclusion: Findings show that, there is significant difference in knowledge of management of hypertension among hypertensive patients. Thus, it is concluded that structure teaching programme should be administered to the hypertensive patients enhance knowledge regarding management of hypertension.

INTRODUCTION

Hypertension is the most important medical and public health issue. Worldwide it affects one billion people leading to 7.1 million deaths per year. Margaret Chan stated that "hypertension is a silent, invisible killer that rarely causes symptoms". Hypertension is defined as a persistent systolic blood pressure more than 140 mm hg and diastolic blood pressure more than 90 mm of hg. Hypertension is one of the leading causes of death and disability among the global adult population. The higher incidence of hypertension damages the physical and economic health of the global community. In India, 196 million adult populations are affected with hypertension. Worldwide, 32 million people died due to non-communicable diseases and among that 16.7 million died due to cardiovascular diseases (CVD). As per world hypertension league (WHL) 2009, 7 million people die every year due to high blood pressure and over 1.5 billion suffer from hypertension globally. The prevalence of hypertension was 59.9 and 69.9 per 1000 in male and female respectively.[1]

WHO (2016) stated that "970 million people worldwide have hypertension. In the developed countries, 330 million people and 640 million in the developing countries have hypertension". Hypertension is rated as one the most important causes of premature death worldwide by who. The estimate of hypertension in 2025 will be 1.56 billion adults. Hypertension is responsible for 62% of cardiovascular diseases and 49% of ischemic heart disease affecting 25 to 30% of the urban population and 10 to 12% of the rural population in India with high blood pressure. Currently, 30% are still unaware that they have hypertension and even though 59% are receiving treatment; only 34% have maintained the target blood pressure.[2]

The nursing care for hypertensive patients focuses on lowering and controlling the blood pressure without adverse effects and reduced cost. The nurse must support and teach the patient to adhere to the treatment regimen by implementing necessary lifestyle changes, taking medications as prescribed and scheduling regular follow up appointments with the heath care provider to monitor progress or identify and treat any complications of disease or therapy.

Need For Study

It has been long recognized that hypertension is an important risk factor for cardiovascular disease and mortality. Traditionally, a high burden of hypertension and its adverse consequences has been mistakenly thought to be an affliction of only economically developed countries. However, studies over the past two decades have reported the majority of people in many economically developing countries have blood pressure above the levels considered optimal with a high prevalence of hypertension present. Although a high prevalence of hypertension in all world regions has been previously reported, a recent publication from the Global Burden of Disease (GBD) Study has placed a renewed focus on the heavy toll high blood pressure is having in all regions of the world.[3]

World Health Organisation (WHO) statistics of 2015 shows that, the prevalence of hypertension among adults ($\geq$18 years) in India is 25.35% (25.9% males and 24.8% females).[3] Earlier, hypertension was a major problem of urban population but now it has spread to rural areas also and now it has become a major public health concern in India both in urban and rural areas. [4]

Hypertension is a global public health problem that estimates about 4.5% of overall disease burden. It is a general health challenge in economically developing and developed countries. High blood pressure prevalence is increased from 11.2% to 28% (p<0.001) and 23–42.2% in rural and

urban area according to the study done in Delhi for about 20 years. It is one of the important risk factors of cardiovascular disease, which is associated with morbidity and mortality. The aim was to identify the significant correlates of hypertension in a rural village in south India.[5]

Hence complementary therapy or alternative therapy reduces the risk of hypertension so researcher has selected this topic because for giving the awareness about the complementary therapy.

OBJECTIVES OF THE STUDY
1. A study to assess the knowledge regarding complementary therapy on management of hypertension among hypertensive patient.
2. To assess the effectiveness of structure teaching programme regarding complementary therapy on hypertension among hypertensive patients
3. To find out the association between post test knowledge score with selected socio-demographic variables.

HYPOTHESIS
H1. There is a significant difference between pre test and post test score of hypertensive patients regarding complementary therapy.
H2. There is a significant association between knowledge score of hypertensive patients regarding complementary therapy and selected socio demographic variables.

ASSUMPTION:
A study is based on the following assumption.
1. Hypertensive patients may have some knowledge regarding complementary therapy.
2. Structure teaching programme may improve the knowledge of hypertensive patients regarding complementary therapy.
3. Hypertension patient's knowledge regarding complementary therapy may vary with its selected demographic variables.

DELIMITATIONS: This study is delimited to,
- The study focused only on hypertensive patients.
- The study conducted duration is 6 weeks.
- Sample size 40 samples

METHODOLOGY
Research Design
It refers to the researchers' overall plan or blue print for obtaining an answer to the research hypothesis. It spells out the strategies that the researcher adopts to collect information that is accurate, objective and interpretable. It helps the researcher in defining attributes, selection of population, their manipulation and control observations to be made and type of statistical analysis to interpret the data. The research design used in this study is pre-experimental one group pre test post test design.

SELECTED VARIABLLES:
Variables selected for the present study are,
- **Independent variable:** In the present study independent variable is structure teaching program on complementary therapy.
- **Dependent variable:** In the present study dependent variable is knowledge of hypertension.

Socio demographic variables of adolescents: Age, Gender, Religion, Dietary pattern, educational status, Occupation, Family monthly income. Source of information, complementary therapy, Duration of Disease, Personal habits, Treatment of hypertension

Setting
The setting is where the population are the portion of it being studied is located and where the study is carried out.
The present pilot study was conducted in Muchakhandi village by using simple random technique 4 sample have been taken for pilot study.

The present study was conducted in Shirur primary health centre at Bagalkot district by using simple random technique 40 sample have been taken for main study

Population:

- **Target population:** Target population for the present study is all the patients attending the Shirur primary health centre at Bagalkot district.
- **Accessible population:** Accessible population for the present study is hypertensive patients attending the Shirur primary health centre at Bagalkot district.

Sample:

In the present study consists of 40 hypertensive patients attending the Shirur primary health centre Bagalkot district.

Sampling technique:

Sampling technique is the process of selecting a portion of the population to obtain data regarding a problem. In the present study simple random sampling is used.

Sample size:

Final sample is determined by the after pilot study using power analysis. Through that calculated value the final sample size 40 hypertensive patients

Criteria for sample selection:

Inclusion criteria: The study includes who are;

1. Hypertension patients.
2. Who are available during the time of data collection.
3. Hypertension patient who all are willing to participate in the study.

Exclusion criteria: The study excludes who are;

1. Hypertension patients sick at the time of data collection.
2. Who have attended previous educational programme on complementary therapy.
3. Hypertension with diabetic mellitus.

RESULT

This chapter deals with analysis and interpretation of data collected from the sample i.e. 40 hypertensive patients selected primary health centre Bagalkot district. A structure close ended questionnaire was prepared and used for data collection and analysis was done with help of descriptive and inferential statistics

Presentation of Data

To begin with data was entered in a master sheet for tabulation and statistical processing the findings were presented under the following headings

Part-I: Description of sample with their socio-demographic variables.

Part-II Assessment of levels of knowledge regarding complementary therapy on management of hypertension among hypertensive patients attending to Shirur primary health centre Bagalkot district

Part-III: Area wise mean, SD, of knowledge score of hypertensive patients regarding complementary therapy

Part-IV: Assessing effectiveness of STP on T test values and P test value

Part -V. Association of knowledge score of people with their Socio-demographic Variables

Part-I: Description of sample with their socio-demographic variables.

Age	Frequency	Percentage
31 – 40	1	2.5%
41 – 50	6	15%
51 – 60	15	37.5%
61 – 70 year or above	18	45%
Gender	**Frequency**	**Percentage**
Male	28	70%
Female	12	30%
Religion	**Frequency**	**Percentage**
Hindu	31	77.5%
Muslim	7	17.5%
Christian	2	5%
Any other specify	-	

Table Continued...		
Educational status	**Frequency**	**Percentage**
Primary	10	25%
Middle	9	22.5%
Secondary	8	20%
PUC	6	15%
Graduate	7	17.5%
Present occupation of participant	**Frequency**	**Percentage**
Farmer	25	62.5%
Teacher	6	15%
Others	9	22.5%
Types of family	**Frequency**	**Percentage**
Nuclear	20	50%
Joint	12	30%
Extended	6	15%
Single	2	5%
Marital status	**Frequency**	**Percentage**
Married	38	95%
Unmarried	-	
Divorced or separated	2	5%
Widow or widower	-	
Dietary pattern	**Frequency**	**Percentage**
Vegetarian	12	30%
Non vegetarian	14	35%
Mixed	14	35%
Monthly income of the family in rupees	**Frequency**	**Percentage**
1000 – 3000	-	
3001 – 5000	3	7.5%
5001 – 10000	15	37.5
Above 10000	22	55%
How long have you been diagnosed with hypertension	**Frequency**	**Percentage**
<1 year	2	5%
1 – 3 year	12	30%
4 – 6 years	10	25%
6 years and above	16	40%
Is any of your family members has a history of hypertension	**Frequency**	**Percentage**
Yes	16	40%
No	24	60%

PART-II: Assessment of levels of knowledge regarding complementary therapy on management of hypertension among hypertensive patients attending to Shirur primary health centre Bagalkot district

Categorization of the people on the basis of the level of knowledge was done as follows: scores 25-30 very good knowledge level, score 19-24 Good knowledge level, score 13-18 average knowledge level, score 07-12 poor knowledge level, score 0-6 very poor knowledge level,

Table 1: Pre test Levels of knowledge regarding complementary therapy on management hypertension N=40

Level of knowledge e	Item	F	%
Very good	0-6	0	0%
Good	7-13	0	0%
Average	13-18	37	92,5%
Poor	19-24	3	7.5%
Very poor	25-30	0	0%

The levels of knowledge regarding complementary therapy on management of hypertension among hypertensive patients.

Reveals that, most of pre test people (92.5%) had average knowledge (7.5%) them had poor knowledge there were no people who had very poor, good, very good regarding complementary therapy.

Table 2: Post test Levels of knowledge regarding complementary therapy on management hypertension N=40

Level of knowledge	Item	F	%
Very good	0-6	13	32.5%
Good	7-12	27	67.5%
Average	13-18	0	0%
Poor	19-24	0	0%
Very poor	25-30	0	0%

Categorization of the people on the basis of the level of knowledge was done as follows: scores 25-30 very good knowledge level, score 19-24 Good knowledge level, score 13-18 average knowledge level, score 07-12 poor knowledge level, score 0-6 very poor knowledge level,

The levels of knowledge regarding complementary therapy on management of hypertension among hypertensive patients.

Where as in post test majority (67.5) of the people had good knowledge level (32.5%) of them had very good knowledge level and there were no people who had very poor, poor, average, regarding complementary therapy

Table 3 Area wise mean, SD, of knowledge score of hypertensive patient regarding complementary therapy, N=40

Knowledge area	Max score	Pre test		Post test	
		Mean	SD	Mean	SD
Regarding hypertension	14	20.17	3.35	26.17	2.18
Regarding dash Diet	11	18.54	1.57	25.45	1.80
Regarding relaxation therapy	05	18.6	1.14	26.5	2.68
Total	30	57.28	6.66	78.12	6.06

The area wise Mean, and SD of knowledge score hypertensive patients reveals that, the pre-test questions regarding hypertension mean is 20.17% and SD 3.35% and the questions regarding dash diet mean is 18.5% and SD 1.57% and the regarding relaxation therapy mean is 18.6% and SD 1.14% and post test questions regarding hypertensions mean 26.17% and SD 2.18% and questions regarding dash diet mean is 25.45% and SD 1.80% and the questions regarding relaxation therapy mean is 26.5% and SD 2.68% total mean of knowledge scores of hypertensive patients was pre-test 57.28% and SD 6.66% and the post-test mean knowledge scores 78.12% and SD 6.06.

Part –III: Assessing the Effectiveness of STP On T Test And P Values

This result showed pre test and post test values of the T test and P values of the result is significant. It represents that there is highly effectiveness about complementary therapy upon pre test to post test knowledge score. So, H1 is accepted

Table 4 Assessing the effectiveness of STP on T test and P test values

T TEST	P VALUES
13.09	<. 001.
	<. 05

H1. There is a significant difference between pre test and post test score of hypertensive patients regarding complementary therapy.

Part IV. Association of knowledge score of people with their Socio-Demographic variables

To find out association of the knowledge score of people with their socio-demographic variables a research hypothesis was formulated

Table 6.5 Association of knowledge score of people with their socio-demographic variables, N=40

Demographic variables	Value of chi-square	P value	Level of significant
Age	0.103	0.748	NS
Gender	1.111	0.291	NS
Religion	0.334	0.563	NS
Education	5.198	0.022	S
Occupation	3.563	0.059	S
Types of family	0.806	0.369	NS
Marital status	0.401	0.526	NS
Dietary pattern	0.334	0.562	NS
Family monthly income	0.173	0.677	NS
How long have been diagnosed with hypertension	0.334	0.562	NS
Is any of your family member has a history of hypertension	0.019	0.888	NS

Note:- NS= Non significant & S= Significant

The association of the knowledge score of people with their socio-demographic variables shows that, there is significant association found between the knowledge of hypertensive patients with their demographic variables like education, occupation p<0.05) occupation (x=3.56; p<0.05) types of family (x=0.80; p<0.05).

And no significant association found between knowledge of hypertensive patients with their demographic variables like age, gender, religion, types of family, marital status, dietary pattern, family monthly income, how long have been diagnosed with hypertension, Is any of your family member has a history of hypertension.

H2. There is a significant association between knowledge score of hypertension patients regarding complementary therapy and selected socio-demographical variable

CONCLUSION

The following conclusions were drawn on the basis of the findings of the study.

The levels of knowledge regarding complementary therapy on management of hypertension among hypertensive patients. Reveals that, most of pre test patients (92.5%) had average knowledge (7.5%) them had poor knowledge there were no patients who had very poor, good, very good regarding complementary therapy. Where as in post test majority (67.5) of the patients had good knowledge level (32.5%) of them had very good knowledge level and there were no patients who had very poor, poor, average, regarding complementary therapy.

Recommendations

Based on the findings of the study the following recommendations are made

1. A similar study can be conducted among medical health educators, School teachers, Anganwadi workers and Village leaders.
2. Effectiveness of teaching programmes to teach family members of hypertensive patients on basic knowledge on hypertension may be tested.
3. Follow-up study can be conducted to evaluate the effectiveness knowledge regarding complementary therapy of structure teaching programme.
4. There is need and scope for counseling services to be offered to family members and their hypertensive patients.

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