A STUDY TO EVALUATE THE EFFECTIVENESS OF YOGA THERAPY ON CONTROL OF HYPERTENSION AMONG HYPERTENSIVE CLIENT AT SELECTED PHC IN PUDUCHERRY.

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ABSTRACT:

A study to evaluate the effectiveness of yoga therapy on control of hypertension among hypertensive client at selected PHC in Puducherry. The objectives of the study were 1. To assess the pre-test levels of blood pressure among experimental group and control group .2. To evaluate the post test levels of blood pressure among experimental group and control group.3. To compare level of blood pressure between experimental group and control group.4. To associate the effectiveness of yoga therapy with their demographic variables.Quantitative approach was used for this study. The research design selected for this study was a quasi experimental study. (Pre-post test control group design). The population in this study was hypertensive clients who residing Kalapet, PHC at Puducherry. The sample for this study was diagnosed hypertensive patients, who met the inclusion criteria residing Kalapet, at Puducherry. The total sample size was 60 among that 30 were taken into experimental group and 30 were taken into control group. In this study simple random sampling technique was used to select the subjects. Intervention includes yoga therapy such as, Basic warm up, Tadasana, Suknapranayam, Chandinadipranayam, Shavasana. Tools used in this study were sphygmomanometer. The samples in the experimental group were practice yoga therapy for 20 min.The investigator designed a tool to assess the Pre-test and Post-test blood pressure among hypertensive patient after yoga therapy practice. The data were analyzed using descriptive and inferential statistics.

The results of the study were

The study to assess the pre-test levels of blood pressure among experimental group and control group .The results exhibits that for the analysis of pretest level of systolic blood pressure in experimental group, revealed that 16(53.33%) had stage 1 hypertension and 14(46.67%) had prehypertension.The analysis of pretest level of diastolic blood pressure in experimental group, revealed that 20(66.67%) had prehypertension and 10(33.33%) had stage 1 hypertension.

The analysis of pretest level of systolic blood pressure in control group shows that 21(70%) had stage 1 Hypertension, 8(26.67%) had prehypertension and only 1(3.33%) had hypertension crisis. The analysis of pretest level of diastolic blood pressure in control group, revealed that 15(50%) had prehypertension and stage 1 hypertension respectively.

The pretest mean value of SBP was 142.55 with S.D 9.76 the pretest mean value of DBP was 88.14 with S.D 3.41 The calculated paired 't' value of t = 25.623 for SBP and t= 33.153 for DBP was found to be statistically significant at $p<0.001$ level. This clearly shows that the implementation of yoga therapy on level

of blood pressure among client with Hypertension had significant reduction in their post test level of blood pressure among subjects with Hypertension in experimental group.

The study to evaluate the post test levels of blood pressure among experimental group and control group. The results exhibits that for the analysis of posttest level of systolic blood pressure in experimental group, revealed that 16(53.33%) had prehypertension and 14(46.67%) had stage 1 Hypertension. Whereas the post test level of diastolic blood pressure in experimental group, revealed that 25(83.33%) had prehypertension and 5(16.67%) had stage 1 Hypertension. The analysis of post test level of systolic blood pressure in control group also shows that 21(70%) had stage 1 Hypertension, 8(26.67%) had prehypertension and only 1(3.33%) had

hypertension crisis. Whereas the post test level of diastolic blood pressure in control group also revealed that 15(50%) had prehypertension and stage 1 Hypertension respectively.The post test mean value of SBP was 146.93 with S.D 18.92. the post test mean value of DBP was 88.18 with S.D 4.88. The calculated paired't' value of t = -1.825 for SBP and t= 1.375 for DBP was not found to be statistically significant.

The comparison of post test level of blood pressure between the experimental and control group.the results exhibits that for the analysis of when comparing the post test level of SBP between the experimental and control group, the post test mean value of SBP in the experimental group was 139.07 with S.D 9.67 and the post test mean value of SBP in the control group was 146.93 with S.D 18.92. The calculated unpaired't' value of t = 2.026 was found to be statistically significant at p<0.05 level. When comparing the post test level of DBP between the experimental and control group, the post test mean value of DBP in experimental group was 85.10 with S.D 3.34 and the post test mean value of DBP in control group was 88.18 with S.D 4.88.Results shows that there is a significant association in post level variable like (p<0.001) of hypertensive clients in experimental group was found to be statistically significant at p<0.01 level.

KEYWORDS: Hypertension, Hypertensive Clients, Yoga Therapy, Primary Health Center.

INTRODUCTION

Now a days ,various non communicable disease condition affecting the people such as, anemia,hypertension,diabetes mellitus, cardio vascular disease, chronic respiratory problem, cancer, visual impairment,accident,cerebro vascular disease, renal problem. Most common vulnerable group is adolescent, women, children, and elderly people. A higher percentage of men than women have high blood pressure until age 45. From ages 45–54 and 55–64, the percentage of men and women is similar; after that a much higher percentage of women than men have high blood pressure. About 69% of people who have a first heart attack, 77% who have a first stroke, and 74% who have congestive heart failure have blood pressure higher than 140/90 mm Hg **(American Heart Association, 2014).**

Hypertension is the most common cardiovascular disease affecting more than one billion people worldwide. Hypertension is defined as a repeatedly elevated blood pressure exceeding 140 over 90 mmHg — a systolic pressure above 140 with a diastolic pressure above 90.

STATEMENT OF THE PROBLEM:

A Study to evaluate the Effectiveness of Yoga Therapy on Control of Hypertension among Hypertensive Client at Selected PHC in Puducherry.

THE OBJECTIVES OF THE STUDY :

1. To assess the pre-test levels of blood pressure among experimental group and control group

2. To evaluate the post test levels of blood pressure among experimental group and control group

3. To compare level of blood pressure between experimental group and control group.

4. To associate the effectiveness of yoga therapy with their demographic variables.

OPERATIONAL DEFINITIONS

1. **Effectiveness**: It refers to outcome of the intervention measured in terms of bio-physical measures such as systolic blood pressure, diastolic blood pressure and observed by investigator and by using yoga therapy which consists of various aspects such as relaxation therapy, physical activity.

2. **Evaluation**: It refers to yoga therapy for reduction of blood pressure

3. Control: The process of holding constant extraneous influences on the dependent variable under study.

4. **Hypertension**: It refers to high blood pressure above normal that 140/90 mm Hg as diagnosed by physician.

5. **Yoga therapy**: Yoga is a physical, mental, and spiritual practice or discipline, that aims to transform body and mind.

ASSUMPTION

1. Yoga therapy will reduce blood pressure.

2. Age 40-60yrs may increases risk for hypertension.

HYPOTHESIS

H_1;   There will be a significant difference between pre and post test levels of blood pressure among hypertensive clients in experimental group and control group.

H_2;   There will be a significant associations between the effectiveness of yoga therapy   and their selected demographic variables.

DELIMITATIONS

This study is delimited to

1. Period of data collection is 4 weeks.

2. Selected Primary Health Center, at Puducherry.

3. Age group of 40-60 years.

RESEARCH METHODOLOGY:

Research approach: Quantitative Research approach was used for this study.

Research design: The Research design selected for this study was a quasi experimental study. (Pre-post-test control group design).

Schematic representation of the Experimental- control group design: Pre & Post-test

Experimental group	O1	X	O2
control group	O1	-	O2

Key Word:

O1- Pre-test assessment of blood pressure in experimental group and control group.

X- Provide yoga therapy

O2- Post-test assessment of blood pressure in experimental group and control group.

Variable

Dependent Variable: In this study dependent variable is hypertensive clients.

Independent variable: In this study independent variable is yoga therapy.

Population: The population in this study was hypertensive clients who residing Kalapet, PHC at Puducherry.

Sample: The sample for this study was diagnosed hypertensive patients, who met the inclusion criteria residing Kalapet, at Puducherry.

Sample size

The total sample size was 60 among that 30 were taken into experimental group and 30 were taken into control group.

Sampling technique

In this study simple random sampling technique was used to select the subjects.

Sampling criteria

In sampling criteria the researcher specifies the characteristics for the population under the study by dealing the inclusion and exclusion criteria.

Inclusion Criteria

Inclusion criteria in this study refers to hypertensive clients,

- Who were available at the time of data collection.
- Who belongs to age groups between 40-60 years.
- Who having hypertension as diagnosed by physician.
- Who were willing to participate in yoga therapy.

Exclusion Criteria

Exclusion criteria in this study refers to hypertensive clients,

- Who are not willing to participate in the study
- With complications related to hypertension

Intervention

Provide yoga therapy such as, Basic warm up,Tadasana, Suknapranayam, Chandinadipranayam, Shavasana.The hypertensive clients were instructed to practice this yoga therapy every morning for about twenty minutes between 10 to 11 AM after breakfast for four week. Blood pressure was monitored and recorded before and after the intervention for all the subjects.

Descriptions of the Tool

The investigator designed a tool to assess the Pre-test and Post-test blood pressure among hypertensive patient (sphygmomanometer) after yoga therapy practice. Observation schedule was developed and used in the study. It consists of the following sections

Section A: Demographic data of hypertensive patients: It consists of 11 items seeking information about age, sex, religion, educational status, occupation, family income, type of family, food habit, habit, body mass index, relaxation therapy.

Section B: Observation schedule on blood pressure: Blood pressure was checked with sphygmomanometer and recorded in the grid provided.

Classification of blood pressure measurements defined by the American Heart Association

Blood Pressure Category	Systolic mm Hg (upper #)		Diastolic mm Hg (lower #)
Normal	less than 120	and	less than 80
Prehypertension	120 – 139	or	80 – 89
High Blood Pressure (Hypertension) Stage 1	140 – 159	or	90 – 99
High Blood Pressure (Hypertension) Stage 2	160 or higher	or	100 or higher
Hypertensive Crisis (Emergency care needed)	Higher than 180	or	Higher than 110

Plan for data analysis

The data analysis was done according to the objectives of the study. Both descriptive and inferential statistics were used.

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of the data collected from 60 Hypertensive clients. The data collected was organized, tabulated and analyzed according to the objectives. The findings based on the descriptive and inferential statistical analysis are presented under the following sections.

ORGANIZATION OF THE DATA

Section A: Description of demographic variables of the hypertensive clients in experimental and control group.

Section B: Assessment of pretest and posttest level of blood pressure among hypertensive clients in experimental and control group.

Section C: Comparison of pretest and posttest level of blood pressure among hypertensive clients in experimental and control group.

Section D: Comparison of pretest and posttest level of blood pressure among hypertensive clients between experimental and control group.

Section E: Association of posttest level of blood pressure among hypertensive clients with their selected demographic variables in the experimental and control group.

SECTION A: DESCRIPTION OF DEMOGRAPHIC VARIABLES OF THE CLIENTS HYPERTENSION IN EXPERIMENTAL AND CONTROL GROUP.

Frequency and percentage distribution of demographic variables of hypertensive clients in experimental and control group.

N=60(30+30)

Demographic Variables	Experimental Group		Control Group	
	No.	%	No.	%
Age in Year				
40 – 45	2	6.67	6	20.00
46 – 50	7	23.33	13	43.33
51 – 55	8	26.67	7	23.33
56 – 60	13	43.33	4	13.33
Sex				
Male	13	43.33	16	53.33
Female	17	56.67	14	46.67
Religion				
Hindu	26	86.67	26	86.67
Muslim	2	6.67	2	6.67
Christian	2	6.67	2	6.67
Others	0	0.00	0	0.00
Educational Status				

Demographic Variables	Experimental Group		Control Group	
	No.	%	No.	%
Illiterate/Primary school	22	73.33	26	86.67
High school	7	23.33	4	13.33
Higher secondary school	0	0.00	0	0.00
Graduation	1	3.33	0	0.00
Occupation				
Sedentary worker	14	46.67	12	40.00
Moderate worker	10	33.33	11	36.67
Heavy worker	6	20.00	7	23.33
Family income				
Below 5,000	13	43.33	13	43.33
5,000 - 10,000	15	50.00	15	50.00
10,000 - 20,000	2	6.67	2	6.67
Above 20,000	0	0.00	0	0.00
Type of Family				
Joint family	13	43.33	11	36.67
Nuclear family	17	56.67	17	56.67
Broken family	0	0.00	2	6.67
Food habit				
Vegetarian	4	13.33	3	10.00
Non-vegetarian	0	0.00	0	0.00
Both	26	86.67	27	90.00
Habit				
Alcoholism	6	20.00	5	16.67
Smoking	5	16.67	7	23.33
Betal leaves chewing	5	16.67	9	30.00
None of the above	14	46.67	9	30.00
Body Mass Index				
Underweight	1	3.33	0	0.00
Normal weight	11	36.67	11	36.67
Overweight	18	60.00	19	63.33
Type of relaxation therapy				
Music	4	13.33	3	10.00
Yoga	0	0.00	0	0.00
Exercise	5	16.67	5	16.67
Brisk walking	21	70.00	22	73.33

Table: The above table, it shows that Frequency and percentage distribution of demographic variables of hypertensive clients in experimental and control group.

Table 1: Age of the hypertensive client in Experimental and Control group
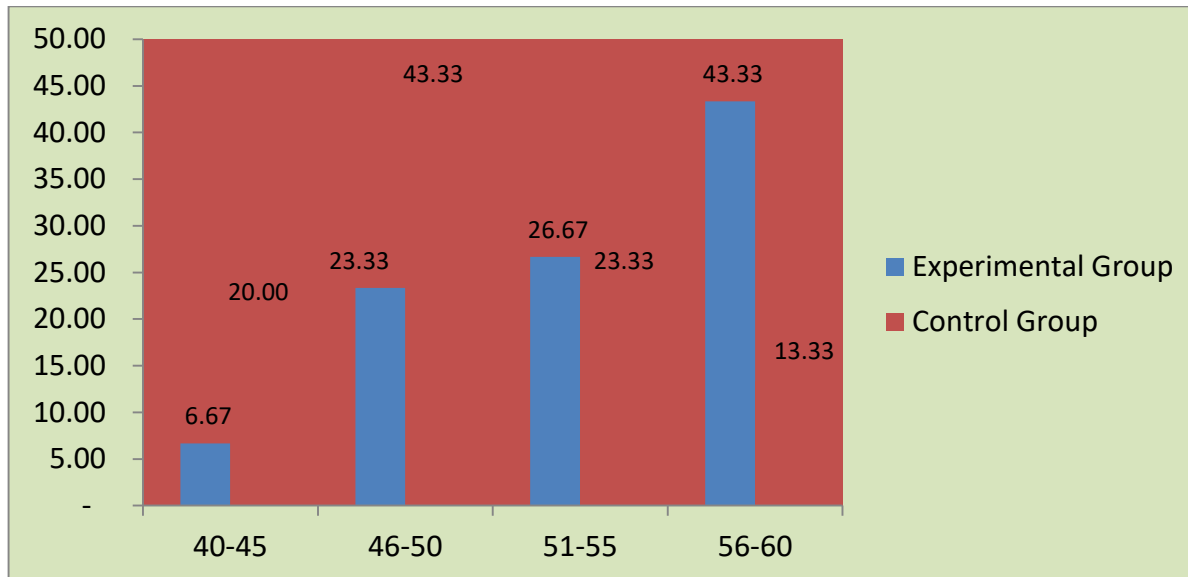

Figure 1: percentage distribution of age

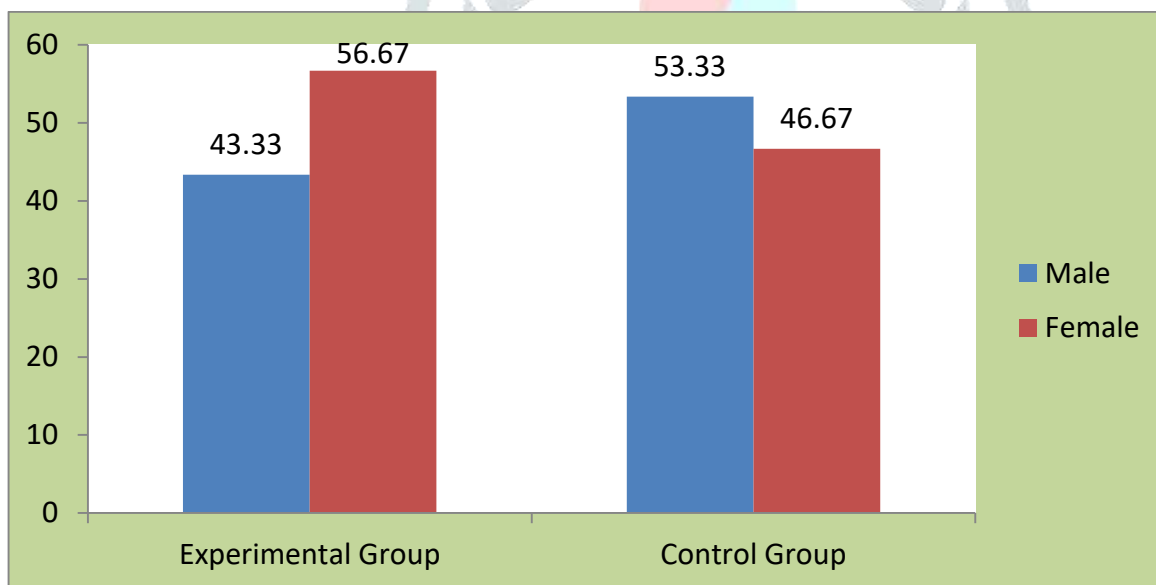**Table 2: Gender of the hypertensive clients in Experimental and Control group**

Figure 2: percentage distribution of gender

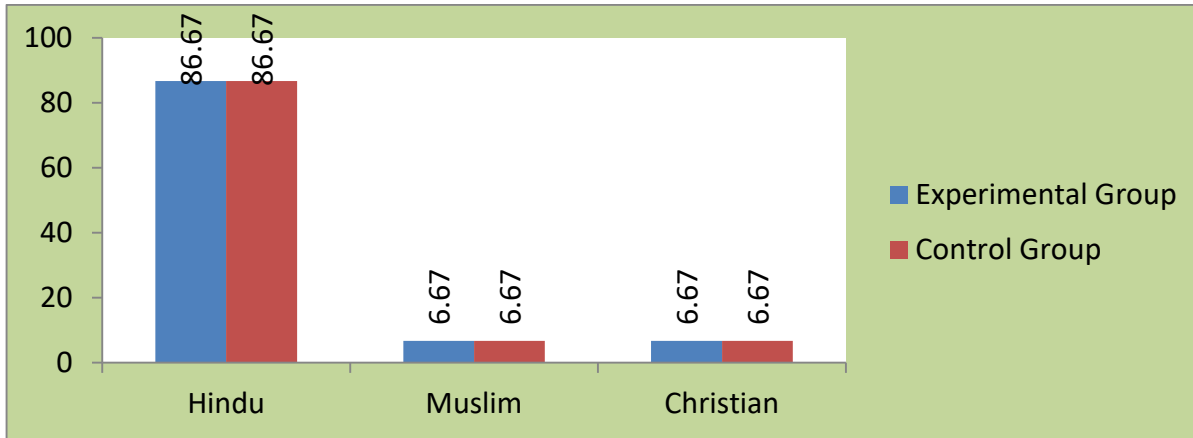**Table 3: Religion of the hypertensive clients in Experimental and Control group**

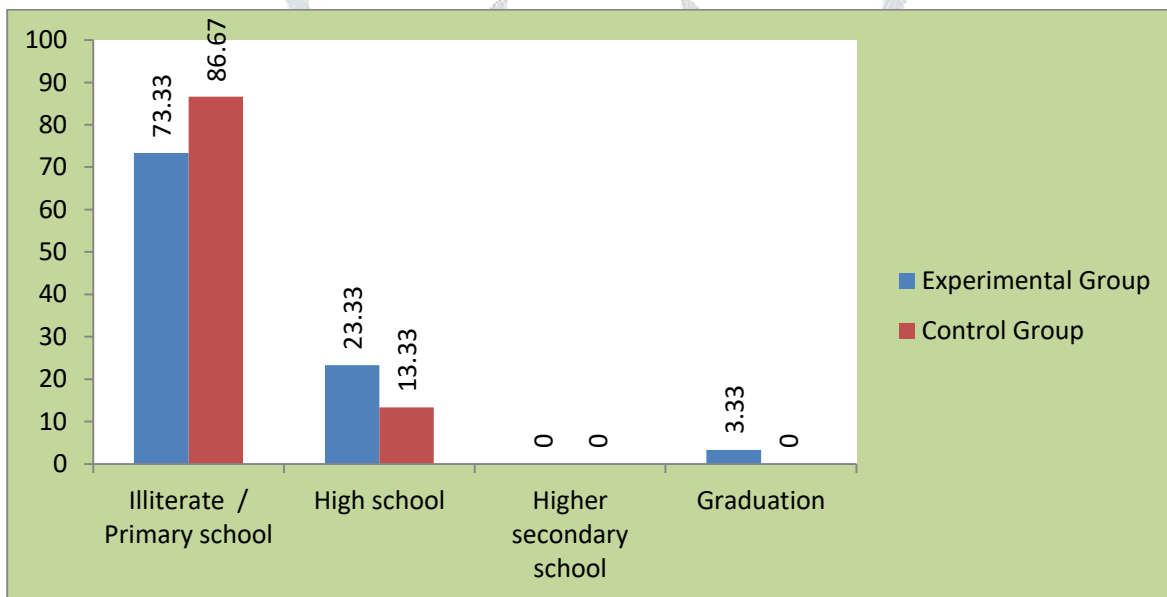
Figure .3: percentage distribution of religion

Table 4: Educational Status of the hypertensive clients in Experimental and Control group

Figure 4: percentage distribution of educational status

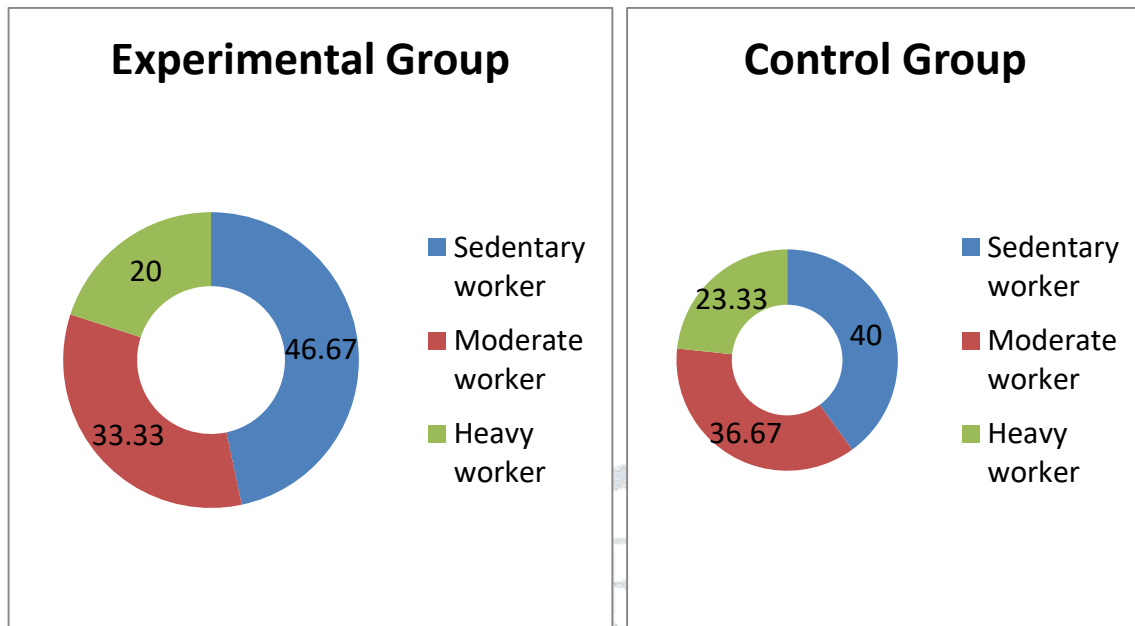**Table 5: Occupation of the hypertensive clients in Experimental and Control group**

Figure 5: percentage distribution of occupation

Table 6: Family income of the hypertensive clients in Experimental and Control group
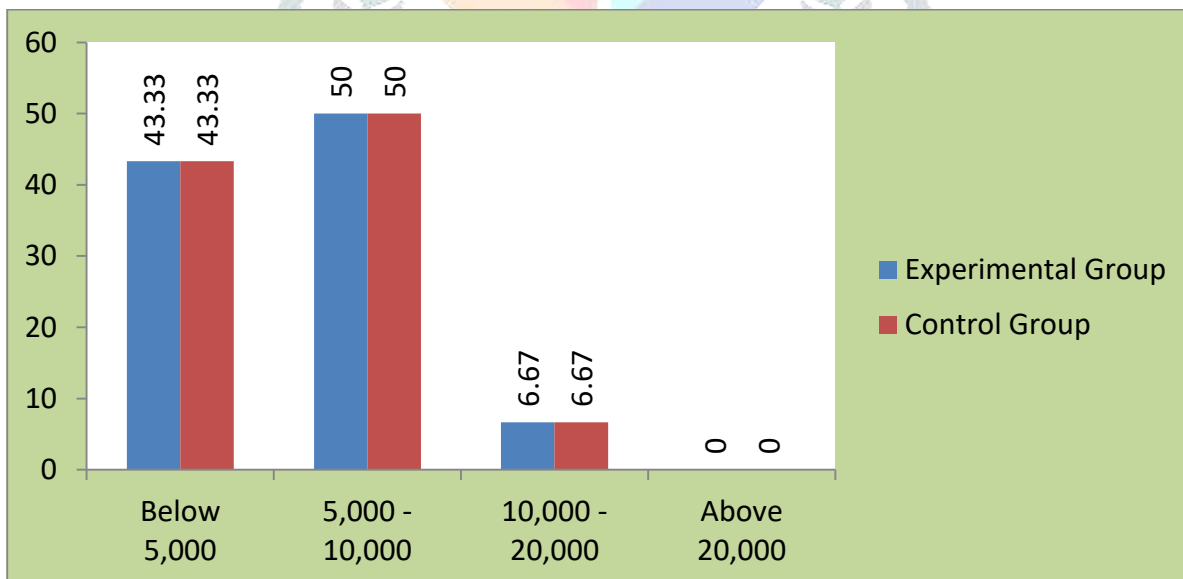

Figure 6: percentage distribution of family income

Table 7: Type of Family of the hypertensive clients in Experimental and Control group
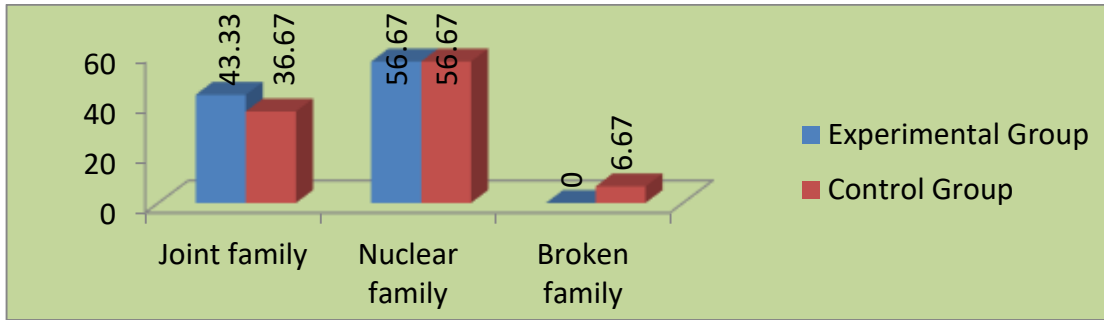

Figure 7: percentage distribution of type of family

Table 8: Food habit of the hypertensive clients in Experimental and Control group
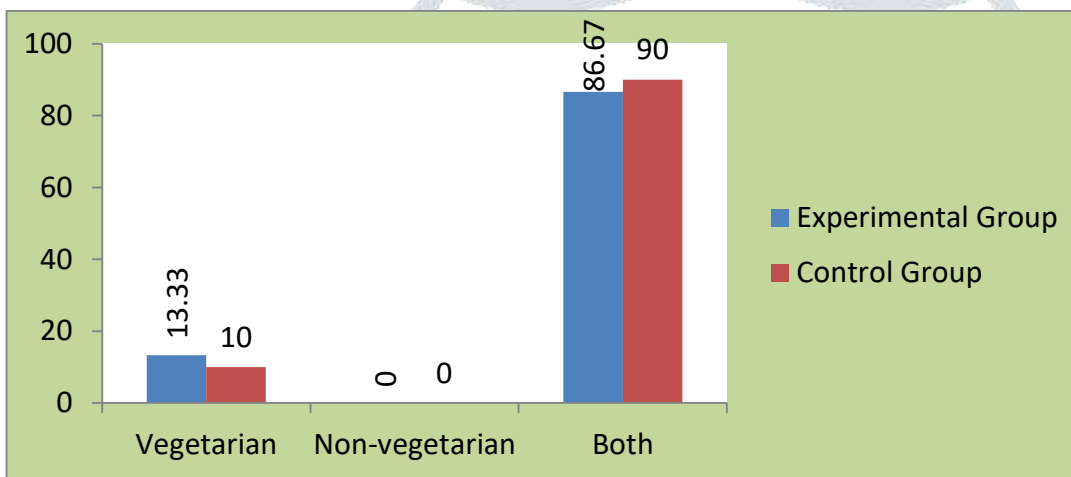

Figure 8: percentage distribution of food habits

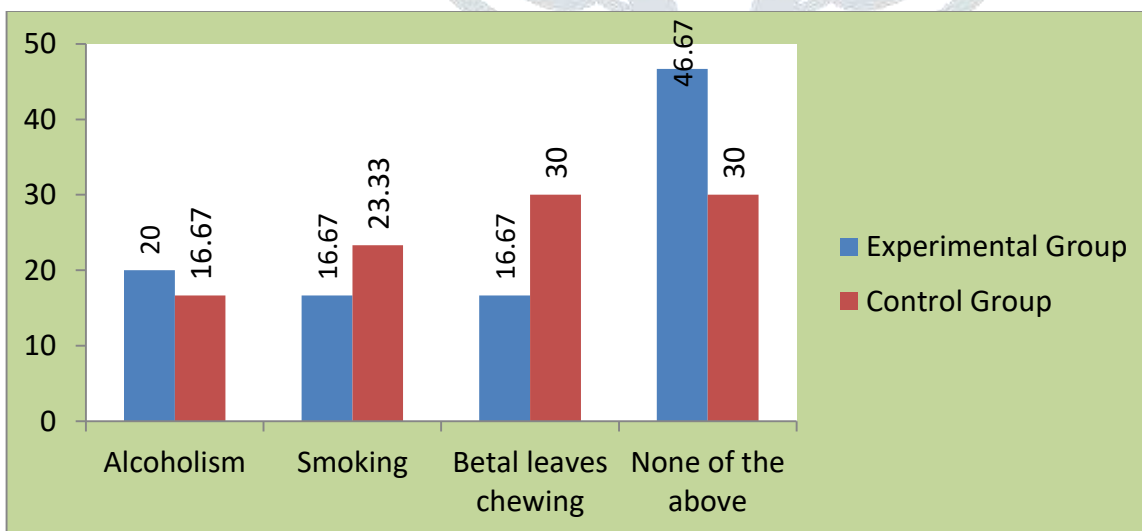**Table 9: Habit of the hypertensive clients in Experimental and Control group**

Figure 9: percentage distribution of habit

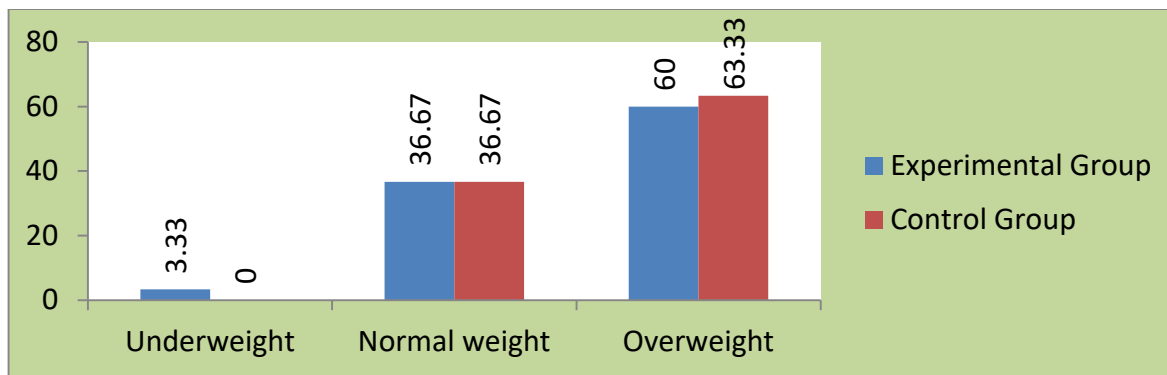**Table 10: Body Mass Index of the hypertensive clients in Experimental and Control group**

Figure 10: percentage distribution of body mass index

Table 11: Relaxation therapy of the hypertensive clients in Experimental and Control group
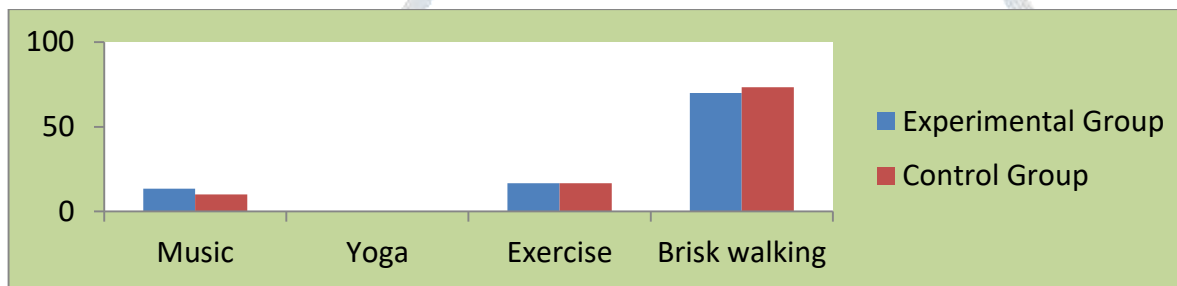
Figure 11: percentage distribution of relaxation therapy

SECTION B: ASSESSMENT OF PRE AND POST TEST LEVEL OF BLOOD PRESSURE IN EXPERIMENTAL AND CONTROL GROUP.

Table 12: Frequency and percentage distribution of pretest and post test level of blood pressure (Systolic) among hypertensive clients in the experimental group
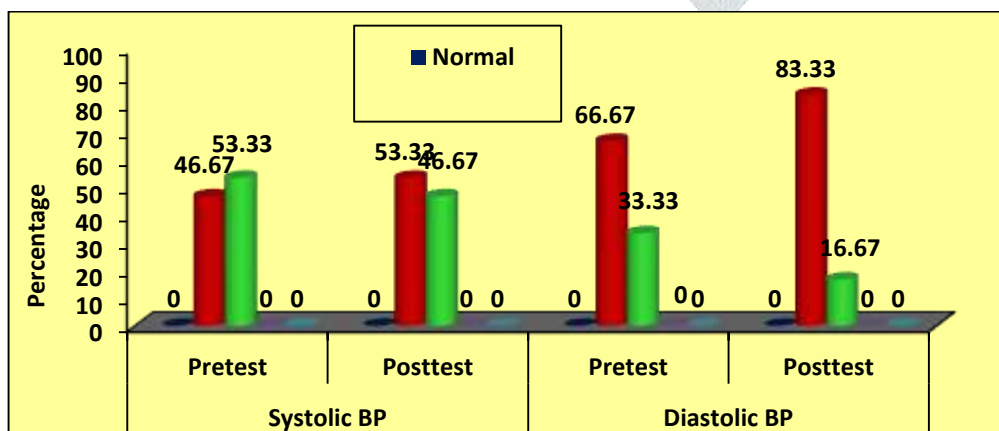
n=30

Figure 12,13 :Percentage distribution of pre and post test level of blood pressure in experimental group.

Table 14: Frequency and percentage distribution of pretest and post test level of blood pressure (Systolic) among hypertensive clients in the control group

Table 15: Frequency and percentage distribution of pretest and post test level of blood pressure (Diastolic) among hypertensive clients in the control group

n=30
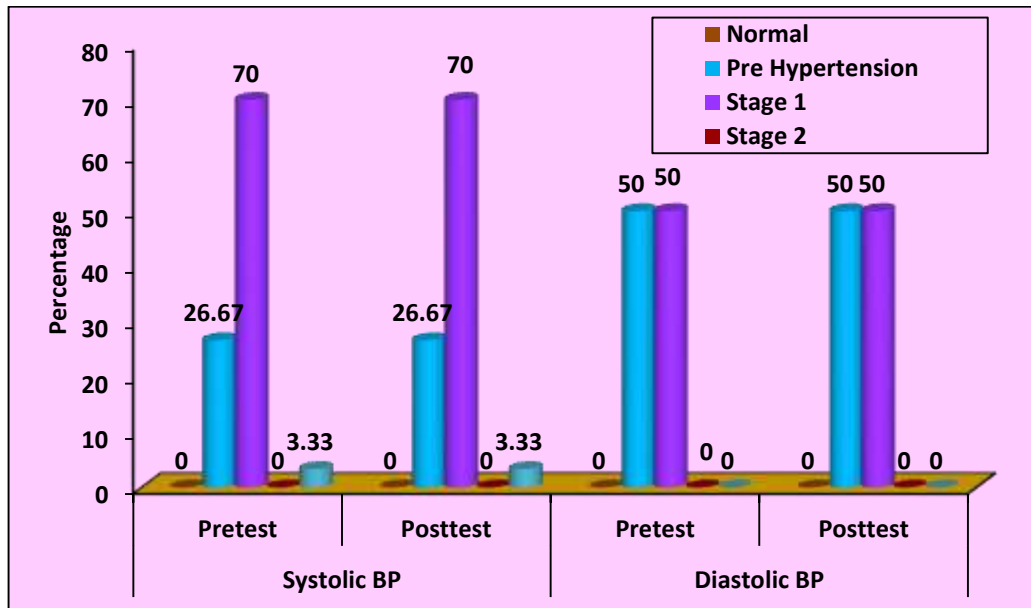
Figure. 14, 15: Percentage distribution of pre and post test level of blood pressure in control group

SECTIONC: COMPARISON OF PRETEST AND POST TEST LEVEL OF BLOOD PRESSURE IN EXPERIMENTAL AND CONTROL GROUP.

n=30

Figure: 16: Comparison of pre and post test level of blood pressure among hypertensive clients in experimental group.

Table 17: Comparison of pre and post test level of blood pressure among hypertensive clients in control group.
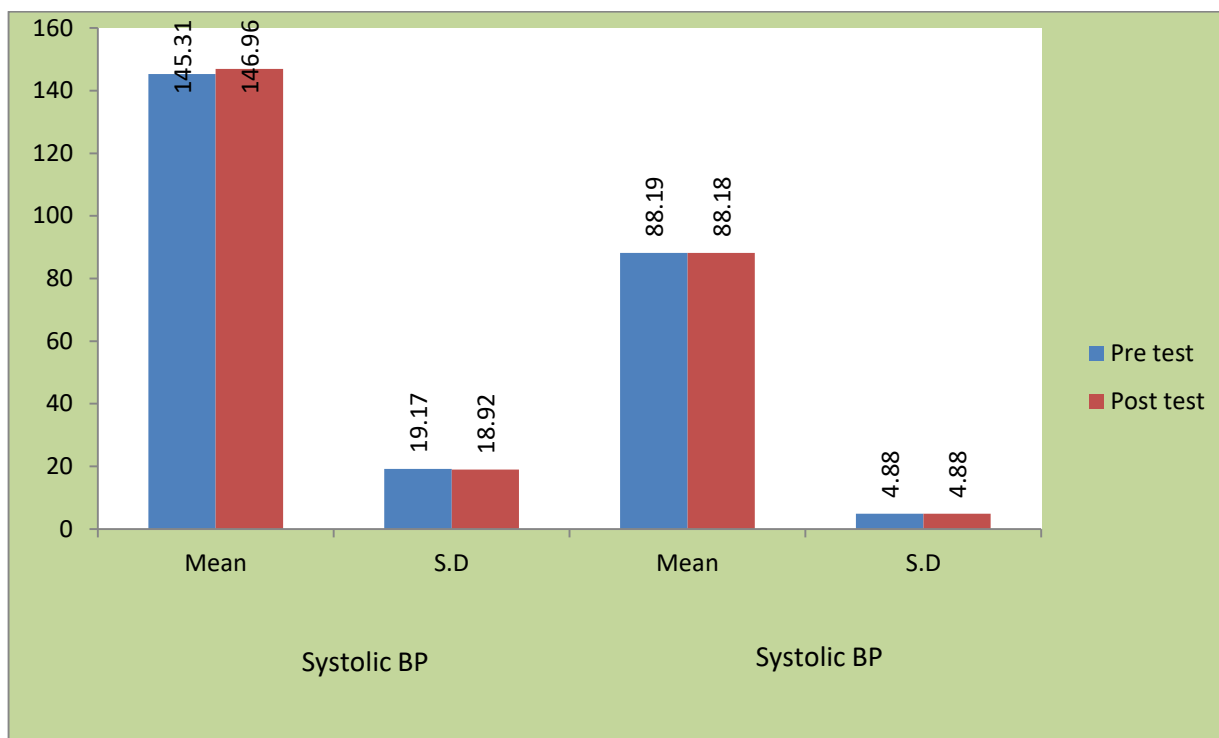
Figure 17: Comparison of pre and post test level of blood pressure among hypertensive clients in control group.

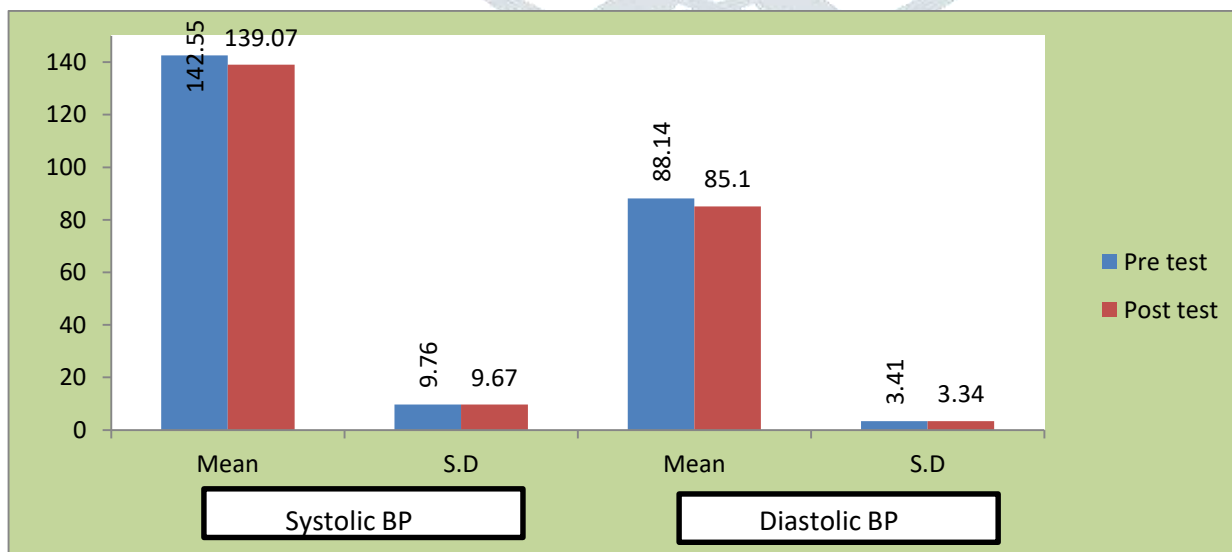**SECTION D: COMPARISON OF PRETEST AND POST TEST LEVEL OF BLOOD PRESSURE BETWEEN THE EXPERIMENTAL AND CONTROL GROUP.**

Table 18: Comparison of pretest level of blood pressure among hypertensive clients between the experimental and control group.

N=60(30+30)

Figure 18: Comparison of pretest level of blood pressure among hypertensive clients between the experimental and control group.
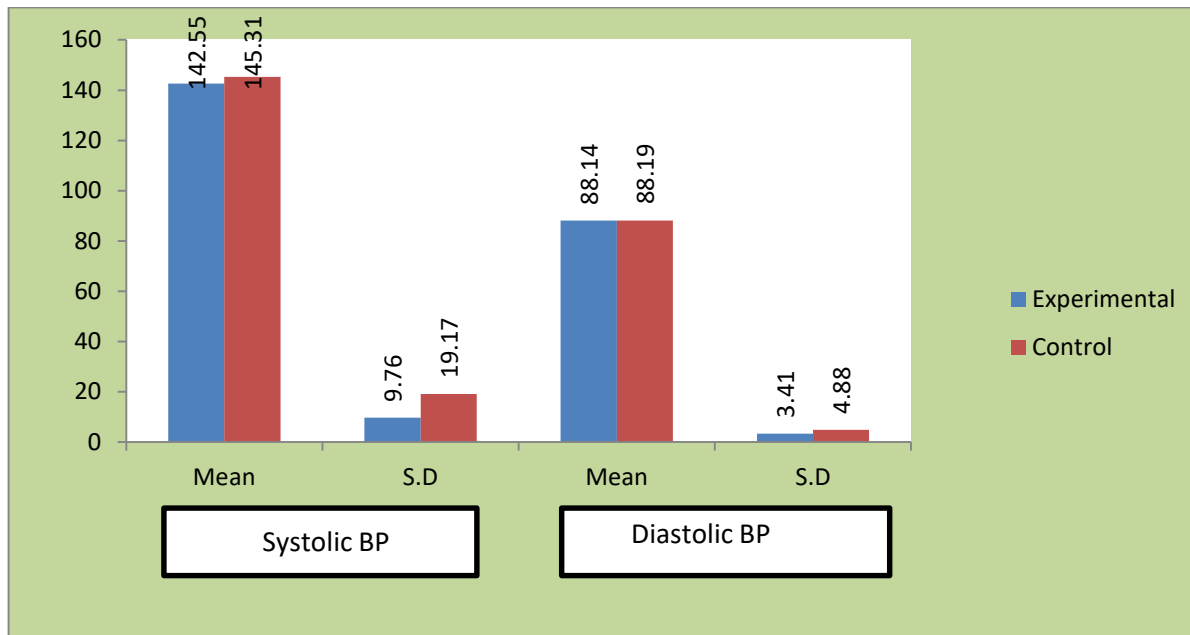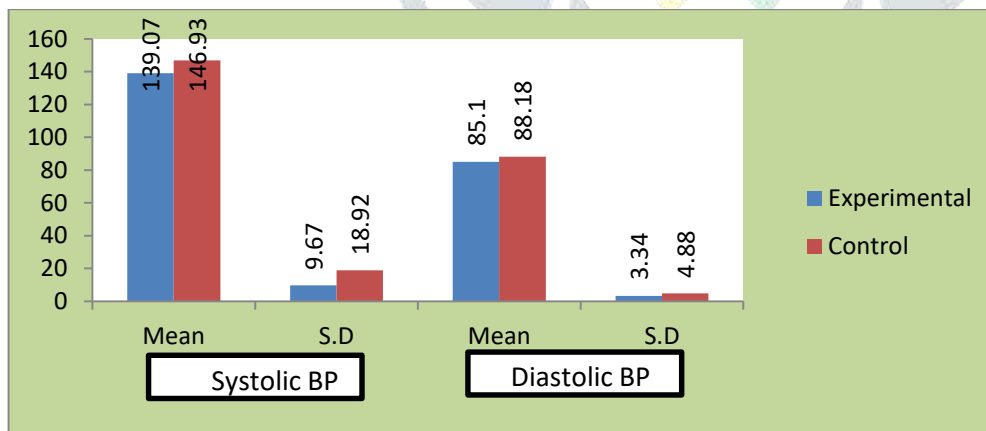
N=60(30+30)

Figure 19: Comparison of post test level of blood pressure among hypertensive clients between the experimental and control group.

SECTION E: ASSOCIATION OF POST TEST LEVEL OF BLOOD PRESSURE WITH THEIR SELECTED DEMOGRAPHIC VARIABLES IN EXPERIMENTAL GROUP.

Table 20: Associations of post test level of systolic blood pressure among hypertensive clients with their selected demographic variables in experimental group.

n=30

Demographic Variables	Prehypertension		Stage 1		Chi-Square Value
	No.	%	No.	%	
Age in Year					$\chi^2=4.105$ d.f = 3 p = 0.250 N.S
40 – 45	0	0	2	6.7	
46 – 50	4	13.3	3	10.0	
51 – 55	6	20.0	2	6.7	
56 – 60	6	20.0	7	23.3	
Sex					$\chi^2=0.621$ d.f = 1 p = 0.431 N.S
Male	8	26.7	5	16.7	
Female	8	26.7	9	30.0	
Religion					$\chi^2=2.493$ d.f = 2 p = 0.287 N.S
Hindu	15	50.0	11	36.7	
Muslim	1	3.3	1	3.3	
Christian	0	0	2	6.7	
Others	-	-	-	-	
Educational Status					$\chi^2=1.197$ d.f = 2 p = 0.550 N.S
Illiterate/Primary school	12	40.0	10	33.3	
High school	3	10.0	4	13.3	
Higher secondary school	-	-	-	-	
Graduation	1	3.3	0	0	
Occupation					$\chi^2=0.268$ d.f = 2 p = 0.875 N.S
Sedentary worker	7	23.3	7	23.3	
Moderate worker	6	20.0	4	13.3	
Heavy worker	3	10.0	3	10.0	
Family income					$\chi^2=0.628$ d.f = 2 p = 0.730 N.S
Below 5,000	8	26.7	5	16.7	
5,000 - 10,000	7	23.3	8	26.7	
10,000 - 20,000	1	3.3	1	3.3	
Above 20,000	-	-	-	-	
Type of Family					$\chi^2=0.475$ d.f = 1 p = 0.491 N.S
Joint family	6	20.0	7	23.3	
Nuclear family	10	33.3	7	23.3	
Broken family	-	-	-	-	
Food habit					$\chi^2=0.871$ d.f = 1 p = 0.351 N.S
Vegetarian	3	10.0	1	3.3	
Non-vegetarian	-	-	-	-	
Both	13	43.3	13	43.3	
Habit					$\chi^2=0.937$ d.f = 3
Alcoholism	4	13.3	2	6.7	
Smoking	3	10.0	2	6.7	

Betal leaves chewing	2	6.7	3	10.0	p = 0.816
None of the above	7	23.3	7	23.3	N.S
Body Mass Index					χ^2=0.962
Underweight	1	3.3	0	0	d.f = 2
Normal weight	6	20.0	5	16.7	p = 0.618
Overweight	9	30.0	9	30.0	N.S
Type of relaxation therapy					χ^2=4.133
Music	4	13.3	0	0	d.f = 2
Yoga	-	-	-	-	p = 0.127
Exercise	2	6.7	3	10.0	N.S
Brisk walking	10	33.3	11	36.7	

N.S – Not Significant

Table 21: Associations of post test level of diastolic blood pressure among hypertensive clients with their selected demographic variables in experimental group.

n=30

Demographic Variables	Prehypertension		Stage 1		Chi-Square Value
	No.	%	No.	%	
Age in Year					χ^2=3.485
40 – 45	1	3.3	1	3.3	d.f = 3
46 – 50	7	23.3	0	0	p = 0.323
51 – 55	7	23.3	1	3.3	N.S
56 – 60	10	33.3	3	10.0	
Sex					χ^2=0.027
Male	11	36.7	2	6.7	d.f = 1
Female	14	46.7	3	10.0	p = 0.869 N.S
Religion					χ^2=10.892
Hindu	23	76.7	3	10.0	d.f = 2
Muslim	2	6.7	0	0	p = 0.004
Christian	0	0	2	6.7	S***
Others	-	-	-	-	
Educational Status					χ^2=1.060
Illiterate/Primary school	19	63.3	3	10.0	d.f = 2
High school	5	16.7	2	6.7	p = 0.589
Higher secondary school	-	-	-	-	N.S
Graduation	1	3.3	0	0	
Occupation					χ^2=0.549
Sedentary worker	11	36.7	3	10.0	d.f = 2
Moderate worker	9	30.0	1	3.3	p = 0.760
Heavy worker	5	16.7	1	3.3	N.S
Family income					χ^2=1.735
Below 5,000	11	36.7	2	6.,7	d.f = 2
5,000 - 10,000	13	43.3	2	6.7	p = 0.420
10,000 - 20,000	1	3.3	1	3.3	N.S

Demographic Variables	Prehypertension		Stage 1		Chi-Square Value
	No.	%	No.	%	
Above 20,000	-	-	-	-	
Type of Family					χ^2=0.679
Joint family	10	33.3	3	10.0	d.f = 1
Nuclear family	15	50.0	2	6.7	p = 0.410
Broken family	-	-	-	-	N.S
Food habit					χ^2=0.923
Vegetarian	4	13.3	0	0	d.f = 1
Non-vegetarian	-	-	-	-	p = 0.337
Both	21	70.0	5	16.7	N.S

Habit					χ^2=1.509
Alcoholism	6	20.0	0	0	d.f = 3
Smoking	4	13.3	1	3.3	p = 0.680
Betal leaves chewing	4	13.3	1	3.3	N.S
None of the above	11	36.7	3	10.0	
Body Mass Index					χ^2=0.218
Underweight	1	3.3	0	0	d.f = 2
Normal weight	9	30.0	2	6.7	p = 0.897
Overweight	15	50.0	3	10.0	N.S
Type of relaxation therapy					χ^2=2.571
Music	4	13.3	0	0	d.f = 2
Yoga	-	-	-	-	p = 0.276
Exercise	5	16.7	0	0	N.S
Brisk walking	16	\53.3	5	16.7	

***p<0.001, S – Significant, N.S – Not Significant.

The data was analysed as per objectives stated:

The first objective of the study to assess pre-test levels of blood pressure among experimental group and control group .The results exhibits that for the analysis of pretest level of systolic blood pressure in experimental group, revealed that 16(53.33%) had stage 1 hypertension and 14(46.67%) had prehypertension.The analysis of pretest level of diastolic blood pressure in experimental group, revealed that 20(66.67%) had prehypertension and 10(33.33%) had stage 1 hypertension.

The analysis of pretest level of systolic blood pressure in control group shows that 21(70%) had stage 1 Hypertension, 8(26.67%) had prehypertension and only 1(3.33%) had hypertension crisis. The analysis of pretest level of diastolic blood pressure in control group, revealed that 15(50%) had prehypertension and stage 1 hypertension respectively.

The pretest mean value of SBP was 142.55 with S.D 9.76 the pretest mean value of DBP was 88.14 with S.D 3.41 The calculated paired 't' value of t = 25.623 for SBP and t= 33.153 for DBP was found to be statistically significant at p<0.001 level.

This clearly shows that the implementation of yoga therapy on level of blood pressure among client with Hypertension had significant reduction in their post test level of blood pressure among subjects with Hypertension in experimental group.

Second objective of the study is to evaluate the post test levels of blood pressure among experimental group and control group. The results exhibits that for the analysis of posttest level systolic blood pressure in experimental group, revealed that 16(53.33%) had prehypertension and 14(46.67%) had stage 1 Hypertension. Whereas the post test level of diastolic blood pressure in experimental group, revealed that 25(83.33%) had prehypertension and 5(16.67%) had stage 1 Hypertension.

The analysis of post test level of systolic blood pressure in control group also shows that 21(70%) had stage 1 Hypertension, 8(26.67%) had prehypertension and only 1(3.33%) had hypertension crisis. Whereas the post test level of diastolic blood pressure in control group also revealed that 15(50%) had prehypertension and stage 1 Hypertension respectively.

The post test mean value of SBP was 146.93 with S.D 18.92. The post test mean value of DBP was 88.18 with S.D 4.88. The calculated paired 't' value of t = -1.825 for SBP and t= 1.375 for DBP was not found to be statistically significant.

Hypothesis: (H1)- From the above result, it is clear that there was significant difference between the pre & post-test level of blood pressure among experimental and control group. **Hence the research hypothesis is H1 is accepted.**

Third objective of the study is to compare level of blood pressure between experimental group and control group. The comparison of pretest level of blood pressure between the experimental and control group. The results exhibits that for the analysis of comparing the pretest level of SBP between the experimental and control group, the pretest mean value of SBP in the experimental group was 142.55 with S.D 9.76 and the pretest mean value of SBP in the control group was 145.31 with S.D 19.17. The calculated unpaired 't' value of t = -0.701 was not found to be statistically significant.

When comparing the pre test level of DBP between the experimental and control group, the pre test mean value of DBP in the experimental group was 88.14 with S.D 3.41 and the pre test mean value of DBP in the control group was 88.19 with S.D 4.88. The calculated unpaired 't' value of t = 0.961 was not found to be statistically significant.

This clearly indicates that there was no significant difference in the pretest level of Hypertension between the experimental and control group.

The comparison of post test level of blood pressure between the experimental and control group.the results exhibits that for the analysis of when comparing the post test level of SBP between the experimental and control group, the post test mean value of SBP in the experimental group was 139.07 with S.D 9.67 and the post test mean value of SBP in the control group was 146.93 with S.D 18.92. The calculated unpaired 't' value of t = 2.026 was found to be statistically significant at p<0.05 level.

When comparing the post test level of DBP between the experimental and control group, the post test mean value of DBP in experimental group was 85.10 with S.D 3.34 and the post test mean value of DBP in control group was 88.18 with S.D 4.88. The calculated unpaired 't' value of t = 2.848 was found to be statistically significant at p<0.01 level.

This clearly shows that the implementation of yoga therapy on level of blood pressure among clients with Hypertension had significant reduction in their post test level of blood pressure among clients with Hypertension in experimental group than the clients with Hypertension in the control group.

Fourth objective of the study is to associate the effectiveness of yoga therapy with their demographic variable. The study results show that, Table 10 that, none of the demographic variables had shown statistically significant association with the posttest level of systolic blood pressure among hypertensive clients in experimental group.

Table 12 shows that the demographic variable religion had shown statistically significant association with the posttest level of diastolic blood pressure at p<0.001 level and the other demographic variables had not shown

statistically significant association with the posttest level of diastolic blood pressure among hypertensive clients in experimental group.

Hypothesis (H2): The study results shows that there is a significant association in post level of diastolic blood pressure with demographic variable like religion (p<0.001) of hypertensive clients in experimental group. **Hence the research hypothesis H2 is accepted.**

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