

Chapter IV

ANALYSIS OF THE DATA AND RESULTS OF THE STUDY

The purpose of the study was to find out the effects of yoga therapy and natural diet on selected cardiovascular, physiological and psychological variables namely systolic blood pressure, diastolic blood pressure, respiratory rate, vital capacity, body mass index, stress and anxiety among women breast cancer patients. To achieve this purpose of the study, thirty women with breast cancer in “Tsuen Mun Cancer Hospital and Queen Mary Hospital, Oncology Department, Hong Kong, China were selected as subjects. The age of the subjects were ranged between 35 to 50 years. The selected subjects were divided in to three equal groups of ten subjects each. Group I underwent yoga therapy, Group II underwent natural diet and Group III acted as control who did not undergo any special training programme. The subjects were free to withdraw their consent incase they felt any discomfort during the period of the training programme. But, there were no such drop out in the study. The following cardio vascular, physiological and psychological variables namely systolic blood pressure, diastolic blood pressure, respiratory rate, vital capacity, body mass index, stress and anxiety were selected as dependent variables. The yogatherapy and yogatherapy with natural diet were selected as independent variables. All the subjects of three groups were tested on selected dependent variables at prior to and immediately after the training programme. The analysis of covariance (ANCOVA) was used to analyze the

significant difference, if any among the groups. Since, three groups were compared, whenever the obtained 'F' ratio for adjusted post test was found to be significant, the Scheffe'S test to find out the paired mean differences, if any. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered as an appropriate.

4.1 ANALYSIS OF THE DATA

The influence of yogatherapy and yogatherapy with natural diet on each criterion variables were analysed separately and presented below.

4.1.1. Systolic Blood Pressure

The analysis of covariance on systolic blood pressure of the pre and post test scores of yogatherapy group, natural diet group and control group have been analyzed and presented in Table III.

TABLE III
ANALYSIS OF COVARIANCE OF THE DATA ON SYSTOLIC BLOOD PRESSURE OF PRE AND POST TESTS SCORES OF YOGA THERAPY, NATURAL DIET AND CONTROL GROUPS

Test	Yogatherapy Group	Natural Diet Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test								
Mean	133.00	132.40	132.50	Between	2.07	2	1.03	0.13
S.D.	2.05	2.80	3.11	Within	216.90	27	8.03	
Post Test								
Mean	120.70	125.10	131.70	Between	613.07	2	306.53	77.28*
S.D.	1.19	1.76	2.49	Within	107.10	27	3.97	
Adjusted Post Test								
Mean	120.51	125.22	131.77	Between	636.54	2	318.27	171.85*
				Within	48.13	26	1.85	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 27 and 2 and 26 are 3.37 and 3.35 respectively).

The table III shows that the pre-test mean values on systolic blood pressure of yogatherapy group, natural diet group and control group are 133.00, 132.40 and 132.50 respectively. The obtained “F” ratio of 0.13 for pre-test scores is less than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on short service. The post-test mean values on systolic blood pressure of yogatherapy group, natural diet group and control group are 120.70, 125.10 and 131.70 respectively. The obtained “F” ratio of 77.28 for post test scores is more than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on systolic blood pressure.

The adjusted post-test mean values on systolic blood pressure of yogatherapy group, natural diet group and control group are 120.51, 125.22 and 131.77 respectively. The obtained “F” ratio of 171.85 for adjusted post-test means is more than the table value of 3.35 for df 2 and 26 required for significance at .05 level of confidence on systolic blood pressure.

The results of the study indicated that there was a significant difference between the adjusted post-test means of yogatherapy group, natural diet group and control group on systolic blood pressure.

Since, three groups were compared, whenever the obtained ‘F’ ratio for adjusted post test was found to be significant, the Scheffe’s test to find out the paired mean differences and it was presented in Table III-A.

TABLE III-A
THE SCHEFFE’S TEST FOR THE DIFFERENCES BETWEEN PAIRED MEANS ON SYSTOLIC BLOOD PRESSURE

Yogatherapy Group	Natural Diet Group	Control Group	Mean Differences	Confidence Interval Value
120.51	125.22	-	4.71*	0.35
120.51	-	131.77	11.26*	0.35
-	125.22	131.77	6.55*	0.35

* Significant at .05 level of confidence.

The table III-A shows that the mean difference values between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on systolic blood pressure 4.71, 11.26 and 6.55 which were greater than the confidence interval value 0.35 required for significance at .05 level of confidence.

The results of this study showed that there was a significant difference exists between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on systolic blood pressure.

The adjusted post-test mean values of yogatherapy group, natural diet group and control group on systolic blood pressure were graphically represented in figure I.

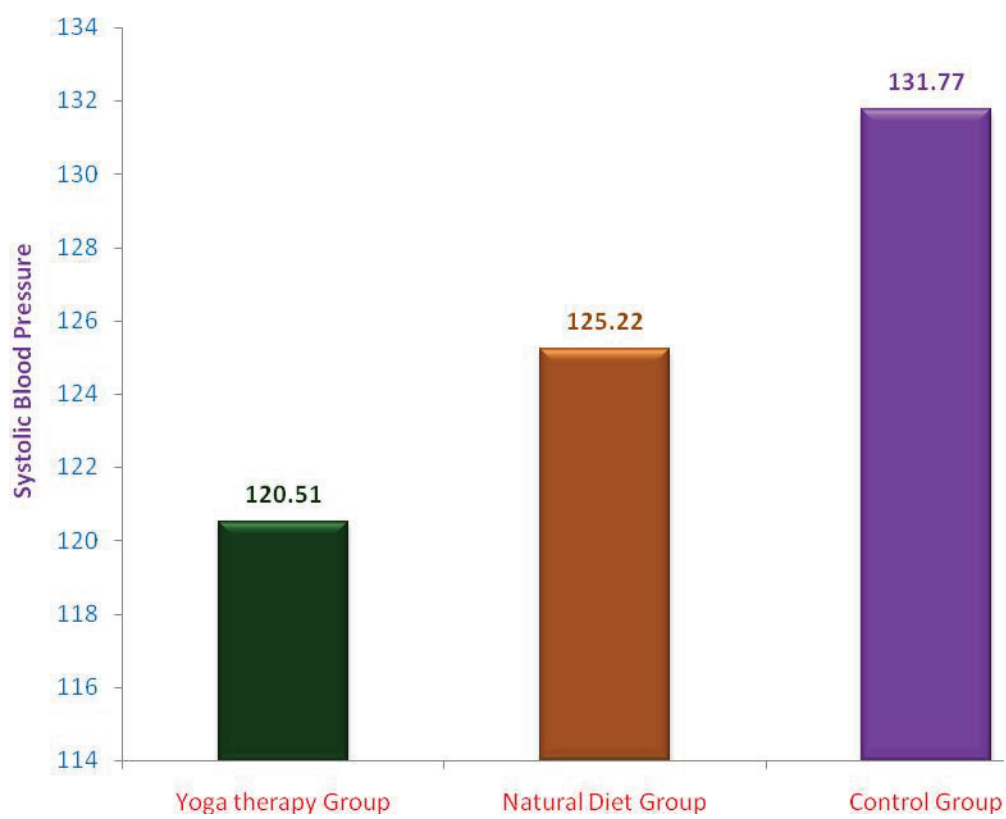


FIGURE I: THE ADJUSTED POST-TEST MEAN VALUES OF YOGA THERAPY GROUP, NATURAL DIET GROUP AND CONTROL GROUP ON SYSTOLIC BLOOD PRESSURE

4.1.2. Diastolic Blood Pressure

The analysis of covariance on diastolic blood pressure of the pre and post test scores of yogatherapy group, natural diet group and control group have been analyzed and presented in Table IV.

TABLE IV
ANALYSIS OF COVARIANCE OF THE DATA ON DIASTOLIC BLOOD PRESSURE OF PRE AND POST TESTS SCORES OF YOGA THERAPY, NATURAL DIET AND CONTROL GROUPS

Test	Yogatherapy Group	Natural Diet Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test								
Mean	83.10	83.30	83.50	Between	0.80	2	0.40	0.15
S.D.	1.70	1.42	1.50	Within	71.50	27	2.65	
Post Test								
Mean	80.60	81.10	83.30	Between	41.27	2	20.63	16.68*
S.D.	0.66	1.14	1.27	Within	33.40	27	1.24	
Adjusted Post Test								
Mean	80.71	81.10	83.19	Between	35.19	2	17.60	39.89*
				Within	11.47	26	0.44	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 27 and 2 and 26 are 3.37 and 3.35 respectively).

The table IV shows that the pre-test mean values on diastolic blood pressure of yogatherapy group, natural diet group and control group are 83.10, 83.30 and 83.50 respectively. The obtained “F” ratio of 0.15 for pre-test scores is less than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on short service. The post-test mean values on diastolic blood pressure of yogatherapy group, natural diet group and control group are 80.60, 81.10 and

83.30 respectively. The obtained “F” ratio of 16.68 for post test scores is more than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on diastolic blood pressure.

The adjusted post-test mean values on diastolic blood pressure of yogatherapy group, natural diet group and control group are 80.71, 81.10 and 83.19 respectively. The obtained “F” ratio of 39.89 for adjusted post-test means is more than the table value of 3.35 for df 2 and 26 required for significance at .05 level of confidence on diastolic blood pressure.

The results of the study indicated that there was a significant difference between the adjusted post-test means of yogatherapy group, natural diet group and control group on diastolic blood pressure.

Since, three groups were compared, whenever the obtained ‘F’ ratio for adjusted post test was found to be significant, the Scheffe’s test to find out the paired mean differences and it was presented in Table IV-A.

TABLE IV-A
THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN PAIRED
MEANS ON DIASTOLIC BLOOD PRESSURE

Yogatherapy Group	Natural Diet Group	Control Group	Mean Differences	Confidence Interval Value
80.71	81.10	-	0.39*	0.17
80.71	-	83.19	2.48*	0.17
-	81.10	83.19	2.09*	0.17

* Significant at .05 level of confidence.

The table IV-A shows that the mean difference values between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on diastolic blood pressure 0.39, 2.48 and 2.09 which were greater than the confidence interval value 0.17 required for significance at .05 level of confidence.

The results of this study showed that there was a significant difference exists between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on diastolic blood pressure.

The adjusted post-test mean values of yogatherapy group, natural diet group and control group on diastolic blood pressure were graphically represented in figure II.

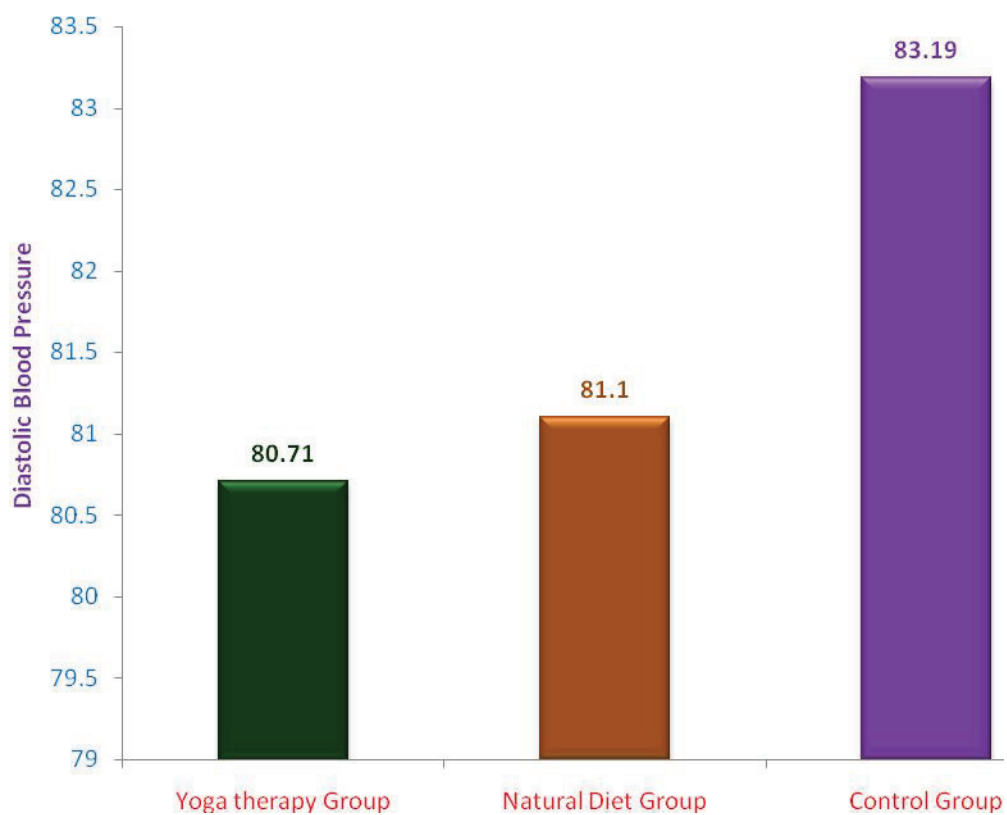


FIGURE II: THE ADJUSTED POST-TEST MEAN VALUES OF YOGA THERAPY GROUP, NATURAL DIET GROUP AND CONTROL GROUP ON DIASTOLIC BLOOD PRESSURE

4.1.3. Respiratory Rate

The analysis of covariance on respiratory rate of the pre and post test scores of yogatherapy group, natural diet group and control group have been analyzed and presented in Table V.

TABLE V
ANALYSIS OF COVARIANCE OF THE DATA ON RESPIRATORY RATE OF PRE AND POST TESTS SCORES OF YOGA THERAPY, NATURAL DIET AND CONTROL GROUPS

Test	Yogatherapy Group	Natural Diet Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test								
Mean	22.60	22.30	22.50	Between	0.47	2	0.23	0.16
S.D.	1.11	1.10	1.20	Within	39.00	27	1.44	
Post Test								
Mean	19.90	20.50	22.30	Between	31.20	2	15.60	15.32*
S.D.	1.04	0.67	1.10	Within	27.50	27	1.02	
Adjusted Post Test								
Mean	19.82	20.61	22.28	Between	31.63	2	15.82	34.32*
				Within	11.98	26	0.46	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 27 and 2 and 26 are 3.37 and 3.35 respectively).

The table V shows that the pre-test mean values on respiratory rate of yogatherapy group, natural diet group and control group are 22.60, 22.30 and 22.50 respectively. The obtained "F" ratio of 0.16 for pre-test scores is less than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on short service. The post-test mean values on respiratory rate of yogatherapy group, natural diet group and control group are 19.90, 20.50 and

22.30 respectively. The obtained “F” ratio of 15.32 for post test scores is more than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on respiratory rate.

The adjusted post-test mean values on respiratory rate of yogatherapy group, natural diet group and control group are 19.82, 20.61 and 22.28 respectively. The obtained “F” ratio of 34.32 for adjusted post-test means is more than the table value of 3.35 for df 2 and 26 required for significance at .05 level of confidence on respiratory rate.

The results of the study indicated that there was a significant difference between the adjusted post-test means of yogatherapy group, natural diet group and control group on respiratory rate.

Since, three groups were compared, whenever the obtained ‘F’ ratio for adjusted post test was found to be significant, the Scheffe’s test to find out the paired mean differences and it was presented in Table V-A.

TABLE V-A
THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN PAIRED
MEANS ON RESPIRATORY RATE

Yogatherapy Group	Natural Diet Group	Control Group	Mean Differences	Confidence Interval Value
19.82	20.61	-	0.79*	0.18
19.82	-	22.28	2.46*	0.18
-	20.61	22.28	1.67*	0.18

* Significant at .05 level of confidence.

The table V-A shows that the mean difference values between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on respiratory rate 0.79, 2.46 and 1.67 which were greater than the confidence interval value 0.18 required for significance at .05 level of confidence.

The results of this study showed that there was a significant difference exists between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on respiratory rate.

The adjusted post-test mean values of yogatherapy group, natural diet group and control group on respiratory rate were graphically represented in figure III.

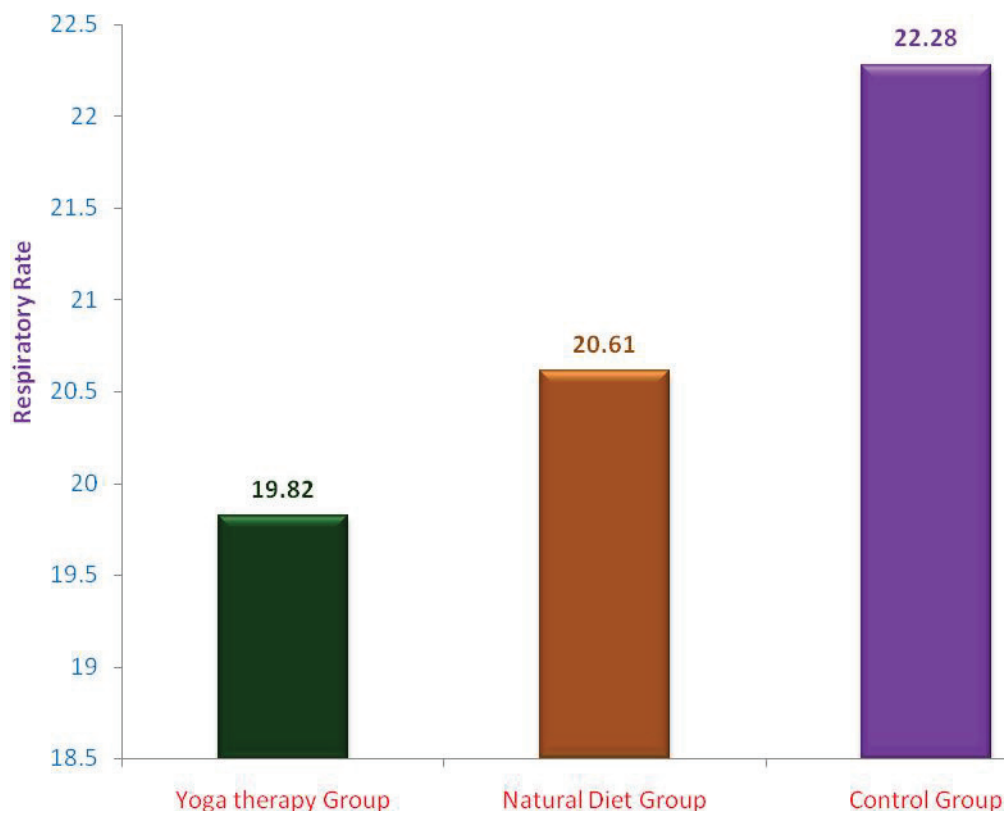


FIGURE III: THE ADJUSTED POST-TEST MEAN VALUES OF YOGA THERAPY GROUP, NATURAL DIET GROUP AND CONTROL GROUP ON RESPIRATORY RATE

4.1.4. Vital Capacity

The analysis of covariance on vital capacity of the pre and post test scores of yogatherapy group, natural diet group and control group have been analyzed and presented in Table VI.

TABLE VI
ANALYSIS OF COVARIANCE OF THE DATA ON VITAL CAPACITY OF PRE AND POST TESTS SCORES OF YOGA THERAPY, NATURAL DIET AND CONTROL GROUPS

Test	Yogatherapy Group	Natural Diet Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test								
Mean	4.21	4.19	4.25	Between	0.02	2	0.01	0.78
S.D.	0.12	0.08	0.10	Within	0.32	27	0.01	
Post Test								
Mean	4.54	4.42	3.67	Between	4.45	2	2.22	4.16*
S.D.	0.09	0.14	1.19	Within	14.42	27	0.53	
Adjusted Post Test								
Mean	4.55	4.45	3.63	Between	4.85	2	2.43	4.52*
				Within	13.97	26	0.54	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 27 and 2 and 26 are 3.37 and 3.35 respectively).

The table VI shows that the pre-test mean values on vital capacity of yogatherapy group, natural diet group and control group are 4.21, 4.19 and 4.25 respectively. The obtained “F” ratio of 0.78 for pre-test scores is less than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on short service. The post-test mean values on vital capacity of yogatherapy group, natural diet group and control group are 4.54, 4.42 and 3.67

respectively. The obtained “F” ratio of 4.16 for post test scores is more than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on vital capacity.

The adjusted post-test mean values on vital capacity of yogatherapy group, natural diet group and control group are 4.55, 4.45 and 3.63 respectively. The obtained “F” ratio of 4.52 for adjusted post-test means is more than the table value of 3.35 for df 2 and 26 required for significance at .05 level of confidence on vital capacity.

The results of the study indicated that there was a significant difference between the adjusted post-test means of yogatherapy group, natural diet group and control group on vital capacity.

Since, three groups were compared, whenever the obtained ‘F’ ratio for adjusted post test was found to be significant, the Scheffe’s test to find out the paired mean differences and it was presented in Table VI-A.

TABLE VI-A
THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN PAIRED
MEANS ON VITAL CAPACITY

Yogatherapy Group	Natural Diet Group	Control Group	Mean Differences	Confidence Interval Value
4.55	4.45	-	0.10*	0.09
4.55	-	3.63	0.92*	0.09
-	4.45	3.63	0.82*	0.09

* Significant at .05 level of confidence.

The table VI-A shows that the mean difference values between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on vital capacity 0.10, 0.92 and 0.82 which were greater than the confidence interval value 0.09 required for significance at .05 level of confidence.

The results of this study showed that there was a significant difference exists between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on vital capacity.

The adjusted post-test mean values of yogatherapy group, natural diet group and control group on vital capacity were graphically represented in figure IV.

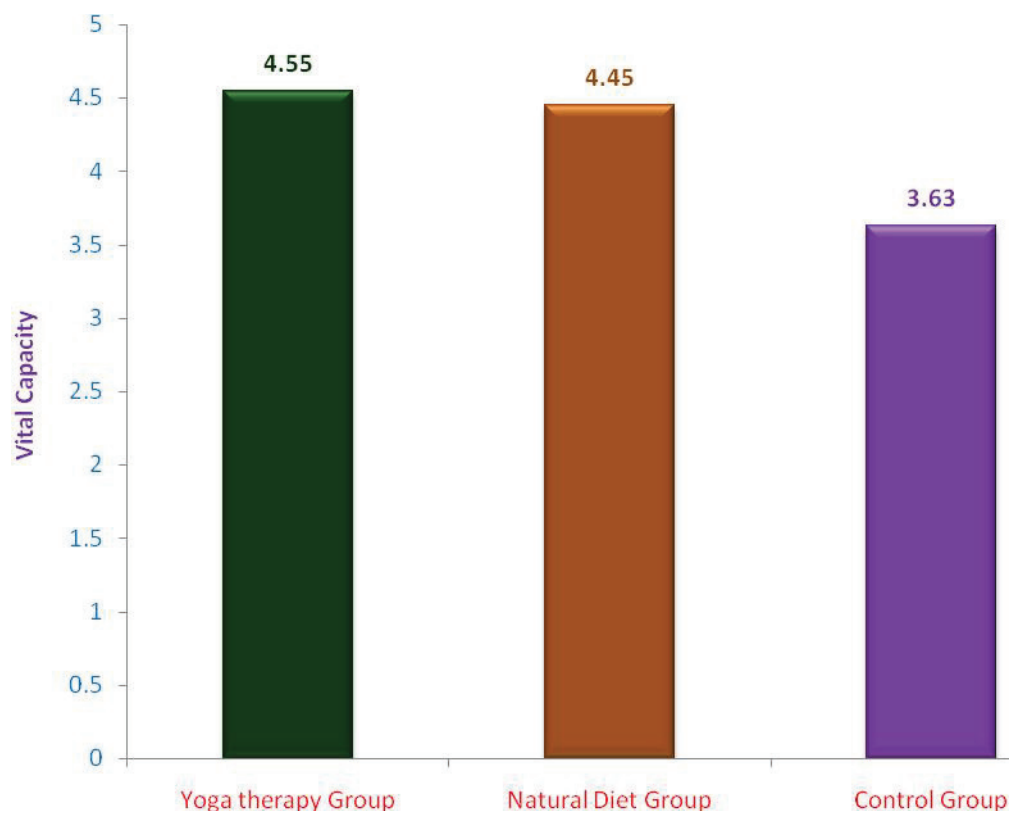


FIGURE IV: THE ADJUSTED POST-TEST MEAN VALUES OF YOGA THERAPY GROUP, NATURAL DIET GROUP AND CONTROL GROUP ON VITAL CAPACITY

4.1.5. Body Mass Index

The analysis of covariance on body mass index of the pre and post test scores of yogatherapy group, natural diet group and control group have been analyzed and presented in Table VII.

TABLE VII
ANALYSIS OF COVARIANCE OF THE DATA ON BODY MASS INDEX
OF PRE AND POST TESTS SCORES OF YOGA THERAPY,
NATURAL DIET AND CONTROL GROUPS

Test	Yogatherapy Group	Natural Diet Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test								
Mean	27.10	27.50	27.70	Between	1.87	2	0.93	0.55
S.D.	1.37	0.81	1.42	Within	45.50	27	1.69	
Post Test								
Mean	24.30	25.40	27.40	Between	49.40	2	24.70	16.31*
S.D.	1.27	0.80	1.36	Within	40.90	27	1.51	
Adjusted Post Test								
Mean	24.56	25.35	27.20	Between	35.48	2	17.74	32.64*
				Within	14.13	26	0.54	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 27 and 2 and 26 are 3.37 and 3.35 respectively).

The table VII shows that the pre-test mean values on body mass index of yogatherapy group, natural diet group and control group are 27.10, 27.50 and 27.70 respectively. The obtained “F” ratio of 0.55 for pre-test scores is less than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on short service. The post-test mean values on body mass index of yogatherapy group, natural diet group and control group are 24.30, 25.40 and

27.40 respectively. The obtained “F” ratio of 16.31 for post test scores is more than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on body mass index.

The adjusted post-test mean values on body mass index of yogatherapy group, natural diet group and control group are 24.56, 25.35 and 27.20 respectively. The obtained “F” ratio of 32.64 for adjusted post-test means is more than the table value of 3.35 for df 2 and 26 required for significance at .05 level of confidence on body mass index.

The results of the study indicated that there was a significant difference between the adjusted post-test means of yogatherapy group, natural diet group and control group on body mass index.

Since, three groups were compared, whenever the obtained ‘F’ ratio for adjusted post test was found to be significant, the Scheffe’s test to find out the paired mean differences and it was presented in Table VII-A.

TABLE VII-A
THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN PAIRED
MEANS ON BODY MASS INDEX

Yogatherapy Group	Natural Diet Group	Control Group	Mean Differences	Confidence Interval Value
24.56	25.35	-	0.79*	0.19
24.56	-	27.20	2.64*	0.19
-	25.35	27.20	1.85*	0.19

* Significant at .05 level of confidence.

The table VII-A shows that the mean difference values between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on body mass index 0.79, 2.64 and 1.85 which were greater than the confidence interval value 0.19 required for significance at .05 level of confidence.

The results of this study showed that there was a significant difference exists between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on body mass index.

The adjusted post-test mean values of yogatherapy group, natural diet group and control group on body mass index were graphically represented in figure V.

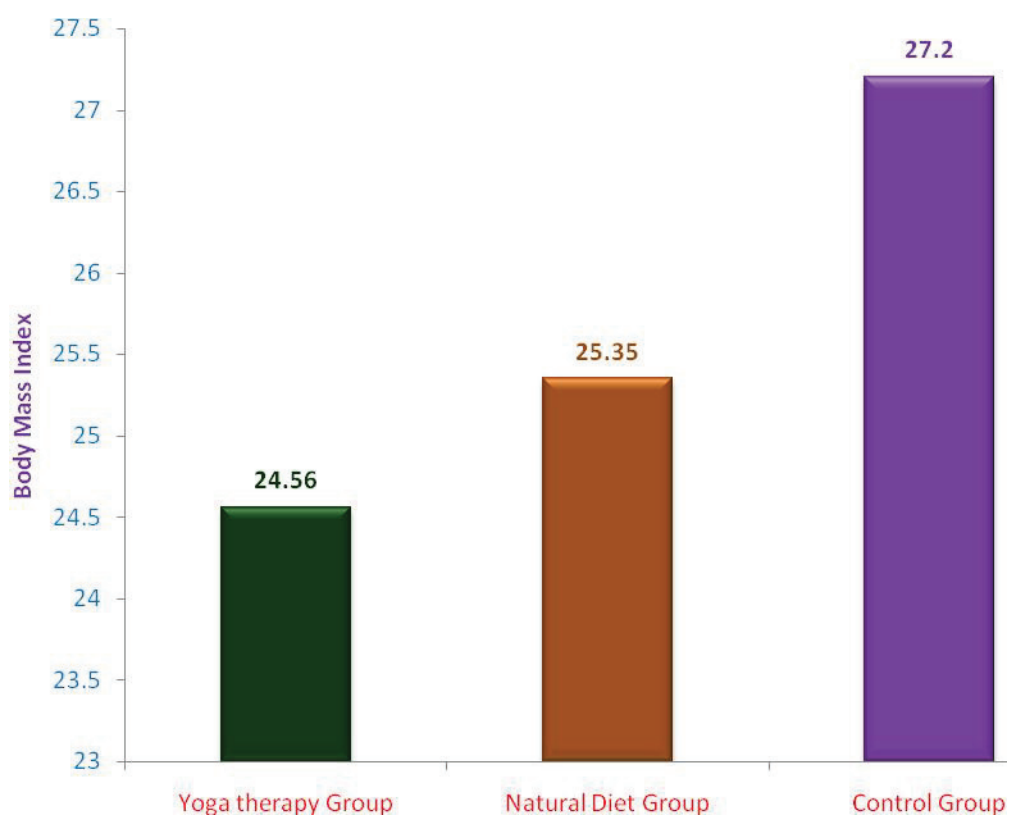


FIGURE V: THE ADJUSTED POST-TEST MEAN VALUES OF YOGA THERAPY GROUP, NATURAL DIET GROUP AND CONTROL GROUP ON BODY MASS INDEX

4.1.6. Stress

The analysis of covariance on stress of the pre and post test scores of yogatherapy group, natural diet group and control group have been analyzed and presented in Table VIII.

TABLE VIII
ANALYSIS OF COVARIANCE OF THE DATA ON STRESS OF PRE AND POST TESTS SCORES OF YOGA THERAPY, NATURAL DIET AND CONTROL GROUPS

Test	Yogatherapy Group	Natural Diet Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test								
Mean	23.60	23.80	23.30	Between	1.27	2	0.63	0.29
S.D.	1.36	1.17	1.62	Within	58.10	27	2.15	
Post Test								
Mean	18.90	19.70	23.10	Between	99.47	2	49.73	24.02*
S.D.	1.37	1.00	1.64	Within	55.90	27	2.07	
Adjusted Post Test								
Mean	18.88	19.53	23.30	Between	112.10	2	56.05	59.44*
				Within	24.52	26	0.94	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 27 and 2 and 26 are 3.37 and 3.35 respectively).

The table VIII shows that the pre-test mean values on stress of yogatherapy group, natural diet group and control group are 23.60, 23.80 and 23.30 respectively. The obtained "F" ratio of 0.29 for pre-test scores is less than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on short service. The post-test mean values on stress of yogatherapy group, natural diet group and control group are 18.90, 19.70 and 23.10

respectively. The obtained “F” ratio of 24.02 for post test scores is more than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on stress.

The adjusted post-test mean values on stress of yogatherapy group, natural diet group and control group are 18.88, 19.53 and 23.30 respectively. The obtained “F” ratio of 59.44 for adjusted post-test means is more than the table value of 3.35 for df 2 and 26 required for significance at .05 level of confidence on stress.

The results of the study indicated that there was a significant difference between the adjusted post-test means of yogatherapy group, natural diet group and control group on stress.

Since, three groups were compared, whenever the obtained ‘F’ ratio for adjusted post test was found to be significant, the Scheffe’s test to find out the paired mean differences and it was presented in Table VIII-A.

TABLE VIII-A
THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN PAIRED
MEANS ON STRESS

Yogatherapy Group	Natural Diet Group	Control Group	Mean Differences	Confidence Interval Value
18.88	19.53	-	0.65*	0.25
18.88	-	23.30	4.42*	0.25
-	19.53	23.30	3.77*	0.25

* Significant at .05 level of confidence.

The table VIII-A shows that the mean difference values between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on stress 0.65, 4.42 and 3.77 which were greater than the confidence interval value 0.25 required for significance at .05 level of confidence.

The results of this study showed that there was a significant difference exists between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on stress.

The adjusted post-test mean values of yogatherapy group, natural diet group and control group on stress were graphically represented in figure VI.

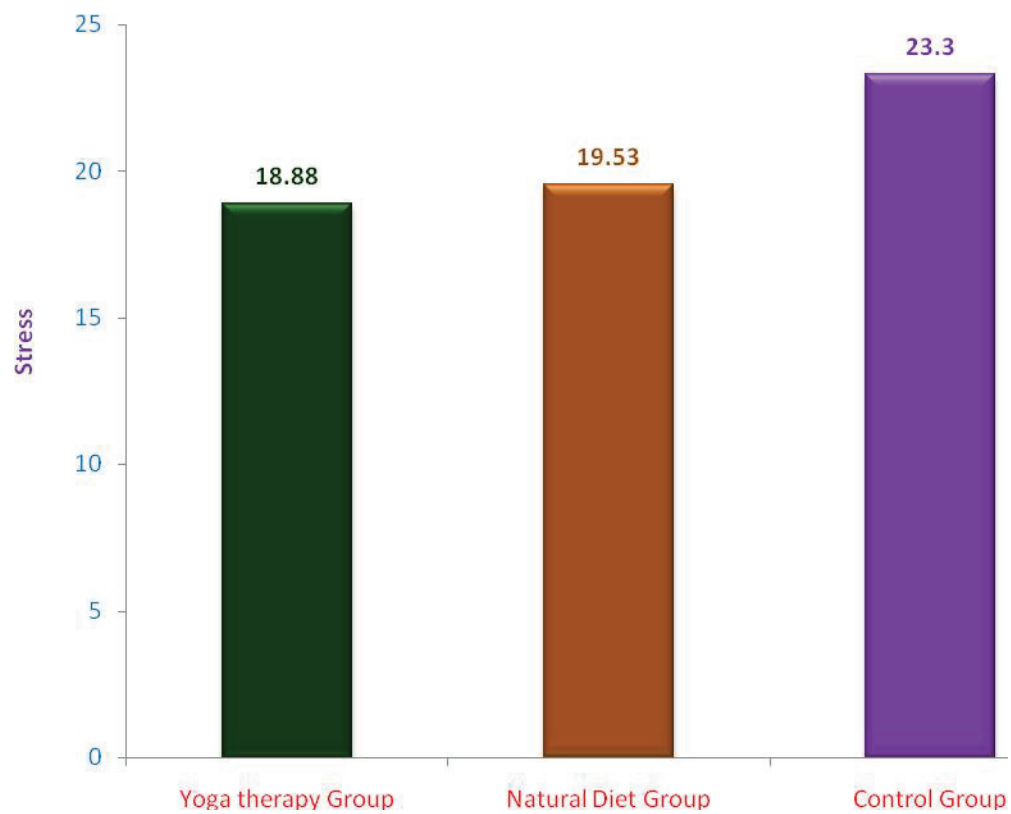


FIGURE VI: THE ADJUSTED POST-TEST MEAN VALUES OF YOGA THERAPY GROUP, NATURAL DIET GROUP AND CONTROL GROUP ON STRESS

4.1.7. Anxiety

The analysis of covariance on anxiety of the pre and post test scores of yogatherapy group, natural diet group and control group have been analyzed and presented in Table IX.

TABLE IX
ANALYSIS OF COVARIANCE OF THE DATA ON ANXIETY OF PRE AND POST TESTS SCORES OF YOGA THERAPY, NATURAL DIET AND CONTROL GROUPS

Test	Yogatherapy Group	Natural Diet Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test								
Mean	41.20	41.10	41.30	Between	0.20	2	0.10	0.05
S.D.	1.25	1.58	1.27	Within	56.60	27	2.10	
Post Test								
Mean	35.60	36.90	40.90	Between	152.60	2	76.30	39.47*
S.D.	1.28	1.30	1.37	Within	52.20	27	1.93	
Adjusted Post Test								
Mean	35.60	36.93	40.87	Between	150.05	2	75.03	41.01*
				Within	47.56	26	1.83	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 27 and 2 and 26 are 3.37 and 3.35 respectively).

The table IX shows that the pre-test mean values on anxiety of yogatherapy group, natural diet group and control group are 41.20, 41.10 and 41.30 respectively. The obtained "F" ratio of 0.05 for pre-test scores is less than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on short service. The post-test mean values on anxiety of yogatherapy

group, natural diet group and control group are 35.60, 36.90 and 40.90 respectively. The obtained “F” ratio of 39.47 for post test scores is more than the table value of 3.37 for df 2 and 27 required for significance at .05 level of confidence on anxiety.

The adjusted post-test mean values on anxiety of yogatherapy group, natural diet group and control group are 35.60, 36.93 and 40.87 respectively. The obtained “F” ratio of 41.01 for adjusted post-test means is more than the table value of 3.35 for df 2 and 26 required for significance at .05 level of confidence on anxiety.

The results of the study indicated that there was a significant difference between the adjusted post-test means of yogatherapy group, natural diet group and control group on anxiety.

Since, three groups were compared, whenever the obtained ‘F’ ratio for adjusted post test was found to be significant, the Scheffe’s test to find out the paired mean differences and it was presented in Table IX-A.

TABLE IX-A
THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN PAIRED
MEANS ON ANXIETY

Yogatherapy Group	Natural Diet Group	Control Group	Mean Differences	Confidence Interval Value
35.60	36.93	-	1.33*	0.35
35.60	-	40.87	5.27*	0.35
-	36.93	40.87	3.94*	0.35

* Significant at .05 level of confidence.

The table IX-A shows that the mean difference values between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on anxiety 1.33, 5.27 and 3.94 which were greater than the confidence interval value 0.35 required for significance at .05 level of confidence.

The results of this study showed that there was a significant difference exists between yoga therapy group and natural diet group, yoga therapy group and control group and natural diet group and control group on anxiety.

The adjusted post-test mean values of yogatherapy group, natural diet group and control group on anxiety were graphically represented in figure I.

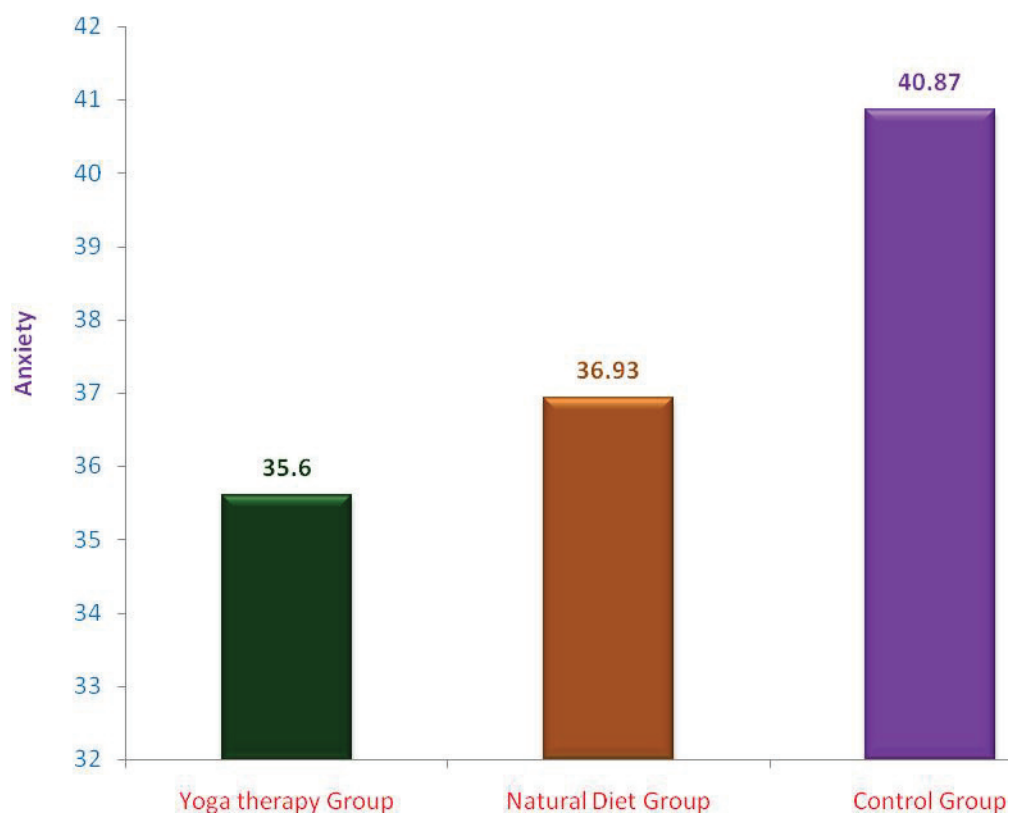


FIGURE VII: THE ADJUSTED POST-TEST MEAN VALUES OF YOGA THERAPY GROUP, NATURAL DIET GROUP AND CONTROL GROUP ON ANXIETY

4.2. RESULTS OF THE STUDY

4.2.1. Cardio Vascular Variables

(Systolic Blood Pressure and Diastolic Blood Pressure)

There was a significant difference among yoga therapy group, natural diet group and control group on selected cardio vascular namely systolic blood pressure and diastolic blood pressure. And there was a significant reduction on selected cardio vascular variables namely systolic blood pressure and diastolic blood pressure due to yoga therapy and natural diet.

4.2.2. Physiological Variables

(Respiratory Rate, Vital Capacity and Body Mass Index)

There was a significant difference among yoga therapy group, natural diet group and control group on selected physiological variables namely respiratory rate, vital capacity and body mass index. And there was a significant change on selected physiological variables namely respiratory rate, vital capacity and body mass index due to yoga therapy and natural diet.

4.2.3. Psychological Variables

(Stress and Anxiety)

There was a significant difference among yoga therapy group, natural diet group and control group on selected psychological variables namely stress and anxiety. And there was a significant reduction on selected psychological variables namely stress and anxiety due to yoga therapy and natural diet.

4.3. DISCUSSION ON FINDINGS

The results of the study showed that significant reduction were noticed on selected criterion variables namely systolic blood pressure, diastolic blood pressure, respiratory rate, body mass index, stress and anxiety due to yoga therapy and natural diet of women cancer patients. The results of the study further showed that significant improvement was noticed on vital capacity due to yoga therapy and natural diet of women cancer patients.

Among the experimental groups, yoga therapy group has dominated on all selected criterion variables when compared to natural diet group.

Bernadi L., and team., 2001, conducted a comparative study to test whether yoga mantras can synchronize and reinforce cardiovascular rhythms and modify baroreflex sensitivity. **Chaya M., Kurpad A., Nagendra H., Nagarathna R., 2006**, studied the effects of long term yoga practice on the basal metabolic rate of healthy adults. When compared to the non yoga control group the long term yoga practice subjects had significantly lower basal metabolic rate.

Vanoni de Godoy., Bringhenti R., Severa A., Gasperi R., Poli L., 2006, conducted a study to measure the effect of yoga and aerobic activity on spirometry and maximal inspiratory pressure. This finding suggests that, healthy individuals do not experience any adverse effects upon practicing yoga.

Haggins M., Moore W., Rundle A, 2007, conducted a study to determine whether or not hatha yoga meets recommended standards for physical activities to maintain health and cardiovascular fitness. It is suggested however, that a hatha yoga session including at least ten minutes of sun salutations may contribute a portion of recommended exercise intensity for achieving cardiovascular fitness.

Smith C., Hancock H., Blake-Mortimer J., Eckert K., 2007, performed a study to determine if yoga and relaxation reduce stress and anxiety. Results of this study showed that after a ten week intervention of one hour per week sessions that yoga was as effective as relaxation in reducing stress, anxiety, and improving mental health status.

Okien B., Zajdel D., Kishiyama S., Flegal K., Dehen C., Haas M., Kraemer D., Lawrence J., Leyva J., 2006, conducted a study to learn the effects of yoga on cognition and quality of life in a group of healthy seniors. These physical improvements may prove valuable in the maintenance of balance and prevention of falls in the elderly. Immobilization is often the beginning of a sequence towards death as an immobilized geriatric patient becomes increasingly susceptible to infections.

Sareen S., Kumari V., Gajebasia KS., Gajebasia KG., 2006, published a study on how yoga could improve the quality of life in chronic pancreatitis patients. The yoga group received biweekly yoga routines for 12 weeks. Statistically significant improvements were seen in quality of life, symptoms of stress, mood, alcohol dependence, and appetite.

Cohen and Townsend, 2007, published a short literature review on yoga and hypertension. **Oken B., Kishiyama S., Zajdel D., Bourdette D., Carlsen J., Haas M., Hugos C., Kraemer D.f., Lawrence J., Mass M., 2004**, published a randomized controlled trial of yoga and its effects on cognitive function, fatigue, mood, and quality of life in multiple sclerosis patients. The study concluded that over a six month period, yoga or exercise class showed statistically significant improvement in measures of fatigue compared to the control group.

Yurtkuran M., Alp A., Dilek K., 2006, studied the effects of a yoga based exercise program on pain, fatigue, sleep disturbance and biochemical markers in hemodialysis patients. . It is important to understand that these subjects continued their normal hemodialysis treatments during the study and that yoga based exercise was tested as a complement to that treatment.

Sherman K., Chekrin D., Erro J., Miglioretti D., Deyo R., 2005, was conducted to compare yoga, exercise, and self-care benefits for patients with chronic low back pain. The yoga group was also superior to the self care group in bothersomeness index. Both of these outcome measures met statistical significance after 26 weeks of intervention. This study suggests yoga is more effective in reducing chronic low back pain than a self-care book or regular exercise.

4.4. DISCUSSION ON HYPOTHESES

In the earlier, the researcher had formulated the following hypothesis, At first, it was hypothesised that there would be significant differences among yoga therapy, natural diet and control groups on selected cardio vascular, physiological and psychological variables namely systolic blood pressure, diastolic blood pressure, respiratory rate, vital capacity, body mass index, stress and anxiety. The results of the study showed that there was a there significant differences among yoga therapy, natural diet and control groups on selected cardio vascular, physiological and psychological variables namely systolic blood pressure, diastolic blood pressure, respiratory rate, vital capacity, body mass index, stress and anxiety. Hence, the researcher's first hypothesis was accepted.

In second, it was hypothesized that there would be significant changes on selected cardio vascular, physiological and psychological variables namely systolic blood pressure, diastolic blood pressure, respiratory rate, vital capacity, body mass index, stress and anxiety due to yoga therapy and natural diet. The results of the study showed that there was a significant changes on selected cardio vascular, physiological and psychological variables namely systolic blood pressure, diastolic blood pressure, respiratory rate, vital capacity, body mass index, stress and anxiety due to yoga therapy and natural diet. Hence, the researcher's second hypothesis was also accepted.