ORIGINAL RESEARCH PAPER

Arts

EFFECT OF YOGIC PRACTICES AND PHYSICAL EXERCISE ON SELECTED CHD RISK FACTORS AMONG MIDDLE AGED MEN

KEY WORDS:

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INTRODUCTION

Yoga is one-of-a-kind orthodox systems of Indian philosophy. It was collated, coordinated and systematized by Patanjali in his classical work, The Yoga Sutras, which resulted in 185 terse aphorisms. In Indian thought, everything is permeated by the supreme universal spirit (paramatma or God) of which the individual human spirit (jivatma) is a part. The yoga of the system is that which teaches the means by which the jivatma can be united, or the communion with the paramathma, and the so-called liberalization (moksa).

Yoga is one of the most ancient cultural heritages of India. The word yoga in Sanskrit means "to unite," and so yoga can be said to connote a unitive discipline. In this sense it is an exercise in moral and mental cultivation that generates good health (arogya), contributes to longevity (chirayu), and the total intrinsic discipline culminates into positive and perennial happiness and peace. Therefore, yoga is the ultimate achievement of the indispensable to life. It is a science that affects not only the conscious self but the subconscious as well. This is a practical physiological training (kriya yoga), which can be practiced by the exalt man to the 'supra mundane level

The yoga postures (known as asanas), to help stretch and relax the muscles and skeletal system. These soothing movements can help create a sense of calmness and well-being. People with high levels of anxiety, and yoga postures, with any kind of physical exercise, have the same bonus of toning while generating deep muscle relaxation. While toning at the same time.

Physical exercises are performed quickly and with a lot of heavy breathing. Yogasanas are performed slowly with relaxation and concentration. The benefits of various yoga techniques have been professed to improve body flexibility, performance, stress reduction, attainment of inner peace and self - realization.

METHODS: This study investigated the effects of total cholesterol, triglycerides and high density lipoproteins on yoga practice and physical exercise. Only middle aged men from Uduppi town, Karnataka state and aged between 35 and 40 years were selected. The selected thirty subjects were randomly divided into three groups of ten each, out of which group-I (n =10) underwent yogic practice, group-II (n= 10) underwent physical exercise training and group - III (n = 10) remained as control. The training program was carried out for six days per week during the mocking session for only (7 to 8 am) for twelve weeks. Total cholesterol, triglycerides and high density lipoproteins were measured by using Boeringher Mannheim kit method. The yogic practice programme and the physical excrete programme was shown in appendices.

ANALYSIS OF DATA

The data collected prior to and after the experimental period on total cholesterol, triglycerides and high density lipoproteins on the yoga practice group, physical exercise group and control group were analysed and presented in the following table - I.

Analysis of Covariance and 'F' Ratio for Total Cholesterol Triglycerides and High Density Lipoproteins for Yoga Practice Group Physical Exercise Group and Control Group

Variable Name	Group Name	Yoga Practice Group	Physical Exercise Group	Control Group	'F' Ratio
Total Cholesterol (mg/dl)	Pre-Test Mean + S.D	199.47 ± 4.19	198.73 ±5.75	2.1.22 ±5.86	0.897
	Post-test Mean +- S.D	198.26 ±6.71	196.82 ±5.29	202.55 ±7.19	8.99*
	Adj. Post-test Mean	197.869	195.517	203.722	32.122*
Triglycerides (mg/dl)	Pre-Test Mean+ S.D	178±3.97	178.37 ±4.75	178.63 ±4.71	0.502
	Post-test Mean +- S.D	177.23 ±3.91	176.03 ±4.67	179.8 ±3.75	3.064
	Adj. Post-test Mean	176.874	175.884	180.309	20.821*
High Density Lipoproteins (mg/dl)	Pre-Test Mean + S.D	49.6 ±1.927	49.37 ±3.745	48.63 ±4.271	0.756
	Post-test Mean +- S.D	50.23 ±1.901	51.03 ±4.627	48.38 ±3.745	2.896
	Adj. Post-test Mean	51.874	52.884	48.109	17.821*

*Significant at .05 level of confidence.(the table value required for significance at .05 level of confidence with df2 and 27 and 26 were 3.35 and 3.36 respectively)

Table - I shows that the pre-test values of triglycerides for yogic practice group physical exercise group and control group 1 were 199.47± 4.19, 198.73± 5.75 and 201.22± 5.86 respectively. The obtained 'F' ratio value of 0.897 for the pre-test scores is less than the total cholesterol value of 3.35 for the required table value of 3.35 with significance of df 2 and 2 at the .05 level of confidence. The post - test mean values of all experimental groups and contours were 198.26 ±6.71, 196,82± 5.29 and 202.52 ±7.19 with the 'F' ratio value of 8.99 for post - test scores is higher than the total cholesterol was greater than the required table value. The adjusted post-test mean values of total the total cholesterol the training group and control group were 197.869, 195.517 and 203.722 respectively. The obtained 'F' ratio value of 32.122 for post - test scores was greater than the required table value of 3.36 with significance with df 2 and 35 at .05 level of confidence.

Table - I shows that the yogic practice group for the triglycerides of the test values was the physical exercise group and the control group were 178.6± 3.97, 178.37± 4.75 and 178.63 ± 4,71 respectively. The obtained 'F' ratio value of 0.502 for the pre- test scores was triglycerides less than the required table value of 3.21 for significance with Significant at .05 level of confidence. (The table value required is significant at .05 level of confidence with df 2 and 3 at the .05 level of

confidence. The post - test mean values for all experimental groups and control groups were 177.23 ± 3.91, 176,03 ± 4.67 and 179.8±3.75 respectively. The obtained 'F' ratio value of 3,064 for post - test scores is the total table of cholesterol that is less than the required table value. The training groups and control group for the triglycerides of the adjusted post - test mean values were 176,874, 175,884 and 180.309, respectively. The obtained 'F' ratio value of 20.821 for post - test scores was greater than the required table value of 3.36 for significance with df 2 and 26 at 05 level of confidence

Table - I shows that the pre - test values for high density lipoproteins The yogic practice group, physical exercise group, and control group were 49.6± 1.927.49.37± 3.745 and 48.63 ± 4.271, respectively. The obtained F ratio value of 0.756 for pre-test scores on high density lipoproteins with lesser than the required table value of 3.35 for significance with df 2 and 27 at .05 level of confidence. The post - test mean values all experimental group and control group were 50.23 ±1.901, 51.03 ± 4627 and 48.38 ± 3.745 respectively The obtained 'F' ration value of 2.896 for post - test scores on high density lipoproteins was lesser than the required tabal value. The adjusted post - test mean values of high density lipoproteins for the training groups and control group were 51.874, 52.884 and 48.109 respectively. The obtained 'F ratio value of 17.821 for adjusted post - test scores was greater than the required table value of 3.36 for significance with df 2 and 26 at .05 level of confidence.

The result of this study showed that was a significant difference among yoga practice, physical exercise group and control group on total cholesterol, triglycerides and high density lipoproteins. Further to determine which of the paired means has a significant difference, Scheffé S test was applied.

Table - 11

Schefte s Test for the Difference Between the Adjusted Post - Test Mean of Total Cholesterol Triglycerides and High Density Lipoproteins

Adjusted Post-test Mean of Total cholesterol				
Yoga Practice Group	**Physical Exercise Group**	**Control Group**	**Mean Difference**	**Confidence interval at .05 level**
197.869		203.722	5.853*	3.326781
197.869	195.517		2.352	3.326781
	195.517	203.722	8.205*	3.326781
Triglycerides				
176.874		180.309	3.435*	1.872899
176.874	175.884		0.99	1.872899
	175.884	180.309	4.425*	1.872899
High Density Lipoproteins				
51.874		48.884	3.765*	2.7652733
51.874	52.884		1.01	2.7652733
	52.884	48.109	4.775*	2.7652733

Significant at 0.05 level of confidence.

RESULTS

Table - Il shows that the adjusted post - test mean difference in total cholesterol between yogic practice group and control group and physical exercise group and control group were 5.853 and 8.205, respectively, which was significant at .05 level of confidence. But there was no. Significant difference was occurred between yogic practice group and physical exercise group (2.352).

Table - II also shows that the adjusted post - test mean difference in triglycerides between the yogic practice group and the physical exercise group and the control group were 3.435 and 4,425, respectively, which were significant at .05 level of confidence. But there was no. Significant difference was occurred between yogic practice group and physical exercise group (0.99). on triglycerides

Table - II also shows that the adjusted post - test mean difference in high density lipoproteins was between the yogic practice group and control group and physical exercise group and control group were 3.765 and 4.775, respectively, which was significant at the .05 level of confidence. But there was no. Significant difference was occurred between yogic practice group and physical exercise group (1.01) on high density lipoproteins.

CONCLUSIONS

Based on the result of the study, the following conclusion were drawn:

1. The decrease in total cholesterol and triglycerides were significant for the yogic practice group and the physical exercise group when compared with the control group.
2. The improvement in high-density lipoproteins was significant for the yogic practice group and the physical exercise group. When compared with the control group.

Appendices

Description of Asanas

The experimental factor selected is the yogasanas and it's been innumerable .So the scholar consulted with experts in the field of yogasana, than selected the following yogaasanas.

Yogasanas: Pavanamutsasana, Suryanamaskar, Gomukhasana, Vajrasana, Paschimattasana, Ardha Matsyendasana Bhuyangasana, Saryangasana, Halasana, Matsyasana, Savasana,

Pranayama: Bhramari, Bhastrika, Nadisudhim, ajd Yoganidra

Physical Exercises

1. **Warmming up**
2. **Physical Exercises:**

Neck rotation Arms forward and back ward rotations, Flexed arm forward and back ward rotations, Twists, Squat thrusts, Sideward lunges, Opposite toe touchrs, Slide leg raising Sit-Ups, Burpees, Heels Raise.

3. **Cool Down**

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