Effect Of Selected Yogasanas On Fasting Blood Sugar And Postprandial Blood Sugar Among Annamalai University Men Staff

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ABSTRACT

The aim was to find out the effect of selected yogasanas on fasting blood sugar and postprandial blood sugar among Annamalai University Men Staff. The investigator administered a brief questionnaire among men staff on their health status and presence of diabetics. The questionnaire was administered among 200 Men staff. Based on the survey, Men Staff undergoing for diabetics treatment were identified. From such Men Staff, randomly selected 40 as subjects for this study. The age group of the subjects was between 45 to 55 years. They were preliminarily assessed of their blood sugar through standard tests and medical reports of them were verified. The selected subjects were assigned into two different groups based on their mean random blood sugar level. Equated groups design was used with twenty subjects in each group, namely control group, experimental group.

I. INTRODUCTION

"Disease is not an entity, but a fluctuating condition of the patient's body, a battle between the substance of disease and the natural self-healing tendency of the body" .. Hippocrates.

It is a common experience of human beings that their minds and bodies are closely interlinked. Any disturbance in either of them is bound to affect the other. Mental worries do lead to physiological problems and bodily discomfort does impact on the

mind. Yoga, the ancient Indian sciences recognized this symbiotic relationship of body and mind long ago and postulated the concepts of Aadhi and Vyaadhi (Srikanth et al., 2010) .

Diabetes is a life style related condition due to an imbalance in handling a glucose load and is not a disease. It is one of the several life style related chronic conditions with an end result of complications that are related to early aging changes resulting in blockage of small and large arteries.

Diabetes is a disease in which the body either fails to produce any insulin (type 1, also called insulin-dependent or juvenile-onset), or the insulin that it does produce is unable to adequately trigger the conversion of food into energy (type 2, also called non-insulin-dependent or adult-onset).

The ancient Indian art and science of Yoga has become popular as a therapeutic modality and is used as such by many in the modern world today. This various practices from traditional yoga can help in correcting health problems faced by the diabetic patients.

Yoga reduces stress and balances the metabolic, autonomic and endocrine functions. The regular practice of Yoga helps reduce insulin resistance and improves the glucose utilization and response to a glucose load. Yoga and reflexology can thus help in the prevention and control of Diabetes and may prevent many of its deadly complications. (Clare Maxwell and Hudson (1990)

"Life is an adventure and diabetes is just something that makes the

II. METHODOLOGY

SELECTION OF SUBJECTS

To select Annamalai University Men Staff on diabetics, the investigator administered a brief questionnaire among men staff on their health status and presence of diabetics. The questionnaire was administered among 150 men staff. Based on the survey, men staff undergoing for diabetics treatment were identified. From such Men staff, randomly selected 40 were selected as subjects for this study. The age group of the subjects was between 45 to 55

years. They were preliminarily assessed of their blood sugar through standard tests and medical reports of them were verified. The selected subjects were assigned into two different groups based on their mean random blood sugar level. Equated groups design was used with twenty subjects in each group, namely control group, experimental group.

III. RESULTS ON FASTING SUGAR

The initial and final means on Yogic practices group and control group on Fasting Sugar among men staff and the obtained results on Analysis of Covariance (ANCOVA) is presented in Table I.

Table I ANALYSIS OF COVARIANCE RESULTS ON EFFECT OF YOGASANAS ON DIABETES VARIABLE FASTING SUGAR

	EXPERIMENTAL GROUP	CONTROL	SOURCE OF VARIANCE	SUM OF SQUARES	DF	MEAN SQUARES	OBTAINED F
Pre Test Mean	133.37	134.23	Between	11.27	1	11.27	0.56
			Within	1176.33	58	20.28	
Post Test Mean	129.37	133.60	Between	268.82	1	268.82	15.87*
			Within	982.17	58	16.93	
Adjusted Post Test Mean	129.75	133.22	Between	179.46	1	179.46	124.06*
			Within	82.45	57	1.45	
Mean Diff	-4.00	-0.63					

Table F-ratio at 0.05 level of confidence for 1 and 58 (df) =4.01, 1 and 57(df) =4.01 .

* Significant

The pre test mean on experimental group was 133.37, and control group was 134.23 and the obtained F value was 0.56, which was less than the required F value of 4.01 to be significant. Hence, it was not significant and the groups were equal at initial stage.

The comparison of post test means, experimental group 129.37 and control group 133.60 proved to be significant at 0.05

level as the obtained F value 15.87 was greater than the required table F value of 4.01 to be significant at 0.05 level.

Taking into consideration the initial and final mean values adjusted post test means were calculated and the obtained F value of 124.06 was greater than the required F value to be significant 4.01 and hence, there was significant difference.

Thus, it was proved that experimental group gained mean difference on, Fasting Sugar -4.00 was due to Yogic practices given to Men staff, and the difference was found to be significant at 0.05 level.

IV. RESULTS ON POSTPARANDIAL SUGAR

The initial and final means on Yogic practices group and control group on Postparandial Sugar among Men staff and the obtained results on Analysis of Covariance (ANCOVA) is presented in Table II.

Table II ANALYSIS OF COVARIANCE RESULTS ON EFFECT OF YOGASANAS ON DIABETES VARIABLE POSTPARANDIAL SUGAR

	EXPERIMENTAL GROUP	CONTROL	SOURCE OF VARIANCE	SUM OF SQUARES	DF	MEAN SQUARES	OBTAINED F
Pre Test Mean	227.80	224.97	Between	120.42	1	120.42	1.75
			Within	3987.77	58	68.75	
Post Test Mean	219.80	224.47	Between	326.67	1	326.67	5.12*
			Within	3700.27	58	63.80	
Adjusted Post Test Mean	218.45	225.82	Between	790.03	1	790.03	558.78*
			Within	80.59	57	1.41	
Mean Diff	-8.00	-0.50					

Table F-ratio at 0.05 level of confidence for 1 and 58 (df) =4.01, 1 and 57(df) =4.01 .

* Significant

The pre test mean on experimental group was 227.80, and control group was 224.97 and the obtained F value was 1.75, which was less than the required F value of 4.01 to be significant. Hence, it was not significant and the groups were equal at initial stage.

The comparison of post test means, experimental group 219.80 and control group 224.47 proved to be significant at 0.05 level as the obtained F value 5.12 was greater than the required table F value of 4.01 to be significant at 0.05 level.

Taking into consideration the initial and final mean values adjusted post test means were calculated and the obtained F value of 558.78 was greater than the required F value to be significant 4.01 and hence, there was significant difference.

Thus, it was proved that experimental group gained mean difference on, Post Parandial Sugar -8.00 was due to Yogic practices given to Men staff and the difference was found to be significant at 0.05 level.

V. CONCLUSIONS

1. The effect of selected yogasanas on diabetics among Men staff was tested fasting sugar and it was concluded that comparing to control group, selected yogasanas beneficially altered fasting sugar and the reduction was statistically significant.

2. The effect of selected yogasanas on diabetics among Men staff was tested post prandial sugar and it was concluded that comparing to control group, selected yogasanas beneficially altered post prandial sugar and the reduction was statistically significant.

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